Entrepreneurial Passion and Small Business Growth in Ghana

By

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DECLARATION

I hereby certify that this thesis is submitted to the University of Warwick in support of my application for the degree of Doctor of Philosophy.

I certify that this thesis has been composed by myself and has not been submitted in any previous application for any degree.

I certify that this thesis does not contain any information previously published where due reference is not made in the text.

ABSTRACT

Predicting small business growth is at the heart of entrepreneurship scholars, practitioners and policy makers because small businesses contribute to employment, innovation and economic growth. Given these and other benefits that small businesses offer to the economies of many countries, researchers have devoted much efforts in predicting what drives small business growth. Scholarly work suggests that business success is dependent on the firm, strategy, the entrepreneur and the environment. Regarding the entrepreneur, passion for starting and growing a business has received much attention by scholars recently. Yet we do not know enough about the relationship between entrepreneurial passion and business growth. This study investigates the relationship between entrepreneurial passion (and its domains) and business growth from the perspective of a less developed country setting. A major insight is to argue that despite being receiving much scholarly attention recently, research regarding the role of passion in venture success in economies of developing countries remains under-researched. A theoretical model comprising the relationship between entrepreneurial passion (and its domains) and business growth is, thus, developed and empirically tested using survey data from 346 small manufacturing businesses operating in Ghana. The study's empirical findings revealed that entrepreneurs' overall level of passion weakly drives business success. The study further revealed that high levels of political network ties and environmental dynamism can help small businesses to achieve higher growth outcome. The disaggregate model of entrepreneurial passion established that two of the domains of passion (passion for founding and passion for developing) can aid entrepreneurs to report success. However, passion for inventing works against business growth. Nevertheless, further analysis revealed that political network ties and environmental dynamism positively moderate the association between entrepreneurial passion domains and business growth. The findings of the study extend research on how passion interacts with network ties and environmental variables to improve business growth.

PART I: INTRODUCTION AND STUDY CONTEXT

CHAPTER 1

INTRODUCTION

1.1 RESEARCH BACKGROUND

Predicting business growth is an important issue to entrepreneurship scholars, managers and policy makers (Storey, 1994; Wiklund, 1998; Coad, 2007; Fafchamps et al., 2014; Federico and Capelleras, 2015; Beck, Lu and Yang, 2015). Scholarly reviews of the literature suggest that internal and environmental factors drive business growth such that business success is dependent on the firm, strategy and the entrepreneur (e.g., Storey, 1994; Smallbone and Wyer, 2000).

Considering the significant role played by entrepreneurs in growing their firms in the face of daunting constraints, recurrent question for scholars and policy makers is: *why do some firms achieve growth in spite of numerous constraints while others do not?* Empirical evidence suggests that individual level variables such as entrepreneurs' growth motivation, communication vision and goals directly affect business growth process (e.g., Delmar and Wiklund, 2003; Wiklund and Shepherd, 2003; Baum and Locke, 2004). Similarly, a growing number of scholars have argued that the individual entrepreneur is important in driving business growth (e.g., Jovanovic, 1982; Morris et al., 2006). Thus, there is evidence to suggest that the individual entrepreneur contributes to firm-level outcome. However, individual level variables such as personality traits weakly predicted venture success (Aldrich and Wiedenmayer, 1993; Sexton, 2001; Baum and Locke, 2004).

Notwithstanding this, there has been a renewal of interest in personality characteristics of entrepreneurs as predictors of business success (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Some researchers have examined the influence of entrepreneurs' displays

of passion to evaluate investors' perceptions of the affective, cognitive and behavioural expression of entrepreneurs' passion (e.g., Chen, Yao and Kotha, 2009).

Passion has been shown to be particularly important in entrepreneurship (e.g., Bird, 1989; Smilor, 1997; Locke, 2000; Shane, Locke and Collins, 2003; Cardon et al., 2009a; Chen, Yao and Kotha, 2009; Cardon et al., 2013) and entrepreneurs who are passionate in pursuit of their business objectives are likely to be successful (Cardon et al., 2009a). Similarly, it has been suggested that passion guides entrepreneurs' thoughts, actions and helps them to engage in entrepreneurial activities (Baum, Locke and Smith, 2001).

Some scholars have argued that entrepreneurs are highly passionate in pursuing their dreams of inventing, founding and developing successful firms (Cardon et al., 2009a; Cardon et al., 2013; Murnieks, Mosakowski and Cardon, 2014). Morevover, it has been argued that passion influences entrepreneurs to pursue their dreams and visions (Shane, Locke and Collins, 2003; Cardon et al., 2009a; Cardon et al., 2013) and guides entrepreneurs' thoughts, actions and helps them to engage in entrepreneurial activities (Baum, Locke and Smith, 2001). This line of reasoning is consistent with research demonstrating that passion increases an individual's ability to pitch his or her ideas (e.g., Elsbach and Kramer, 2003). Therefore, entrepreneurial passion involving positive and intense feelings may be an important driver of business growth. A major reason is that passion has been found to have a positive influence on creativity, persistence and absorption of entrepreneurs (Cardon et al., 2005a; Baron and Tang, 2011).

Yet few studies have investigated the relationship between entrepreneurs' passion and business growth (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). This is a pity given the role of passion in fostering creativity and opportunity exploitation (Sundararajan

and Peters, 2007; Baron, 2008). Thus, it is important to understand the role of entrepreneurial passion in business growth process.

The initial studies of the relationship between passion and business growth treated passion as a personality trait of entrepreneurs (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Moreover, these studies on passion and business growth often focus on passion for work in general rather than passion associated with the entrepreneurial role (e.g., Murnieks, 2007; Murnieks, Mosakowski and Cardon, 2014).

Whilst the trait approach to passion has been shown to be related to venture growth (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), the mechanism(s) through which passion relates to venture growth has been subject to some debate, with the suggestion that there is an indirect link between passion and venture growth. Various factors have been suggested to act as a mediation between passion and growth including vision, goals and self-efficacy (Baum and Locke, 2004), motivation, competence and strategy (Baum et al., 2001; Brierly, Kessler and Christensen, 2000) or opportunity recognition (Shane, Locke and Collins, 2003). It is, therefore, suggested that researchers focus on passion that is *experienced* by entrepreneurs and not that is personality trait (Mitteness, Sudek and Cardon, 2012; Cardon et al., 2013).

Additionally, passion has been studied from the *displayed* perspective (e.g., Chen, Yao and Kotha, 2009). However, some scholars have argued that entrepreneurs' displayed passion has only helped researchers to understand the cognitive and behavioural aspects of passion and may simply reflect impression management and may not denote experienced passion (Cardon et al., 2013). This suggests that Chen, Yao and Kotha's (2009) study does not reflect how entrepreneurs report passion they experience. As such, scholars have called for research that examines the effect of *experienced* passion on firm-level outcomes such as

business growth (e.g., Cardon et al., 2013; Murnieks, Mosakowski and Cardon, 2014). Thus, recent work has taken passion in a different track.

This view of passion has replaced the displayed and trait approaches with a new approach drawing on identity theory (e.g., Cardon et al., 2009a; Cardon et al., 2013; Murnieks, Mosakowski and Cardon, 2014). This approach disaggregates passion into three distinct entrepreneurial role identities: inventor, founder and developer (Cardon et al., 2013). This notion of passion views it as a result of being engaged in activities that have a meaning and salience for the individual (Cardon et al., 2009a; Cardon et al., 2013).

Consistent with this notion, the present study examines how entrepreneurs report the passion they experience (Cardon et al., 2009a; Cardon and Kirk, 2015; Cardon et al., 2013) and its impact on business growth. This study, therefore, draws on Cardon et al.'s (2009a: 517) theoretical model and defines entrepreneurial passion as ''consciously accessible, positive feelings'' that result from ''engagement in activities that have identity meaning and salience to the entrepreneur''. The section that follows next discusses the main gaps in the literature.

1.2 GAPS IN THE LITERATURE

1.2.1 Entrepreneurial Passion and Business Growth

The existing literature is limited in several respects. First, passion-business growth studies are biased to data originating from the developed world (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Second, previous scholarly studies on passion and business growth are limited to examining mediation relationships including the individual's goals, cognitive engagement, and deliberate practice (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004; Vallerand et al., 2008c; Ho et al., 2011). A major conclusion from these studies is that passion has no direct effect on venture growth but mediated by vision, goals and self-efficacy (Baum and Locke, 2004), motivation, competence and strategy (Baum et

al., 2001; Brierly, Kessler and Christensen, 2000) or opportunity recognition (Shane, Locke and Collins, 2003). As such scholars have argued that trait approach used in previous studies is not the best to treat passion. Extant studies that treat passion as experience reported by entrepreneurs have called for scholarly studies that examine the influence of passion experienced by entrepreneurs on firm-level outcome such as growth (e.g., Cardon et al., 2009a; Cardon et al., 2009b; Mitteness, Sudek and Cardon, 2012; Cardon et al., 2013).

In response to these calls, this study focuses on entrepreneurs' *experience* and report the passion they experience. Moreover, there have been calls from entrepreneurship scholars to study the experience of entrepreneurial passion in each domain (passion for inventing, passion for founding and passion for developing) separately (e.g., Cardon et al., 2013). It has been suggested that in order to reveal the grand contribution of each domain to business success, researchers must model the effect of each entrepreneurial passion domain on business growth (Cardon et al., 2009a; Cardon et al., 2013).

The joint and individual effects approach to modelling entrepreneurial passion brings some advantages. An important benefit for putting all domains into an overall average measure of entrepreneurial passion (aggregate effect model) is that, researchers can determine how entrepreneurial passion in totality, is related to business growth. Conversely, a major advantage of examining each domain separately (disaggregate effect model) is that, important information in relation to the performance of each domain towards business growth is provided and this might contribute to unique theory development.

The current study addressees the extent to which the entrepreneurial passion domains vary independently in relation to business growth. Therefore, the present study argues that theoretical and empirical contributions on these associations are limited in the entrepreneurial passion literature. Specifically, the present study responds to calls in the

passion literature to study the experience of entrepreneurial passion in each domain separately (e.g, Cardon et al., 2013). In doing so, the present study contributes to the revival of interest in examining the influence of passion on business growth. Additionally, this study shows the effect of overall passion construct and each passion domain on business growth.

1.2.2 Examination of Contingency Effects

The possibilities of whether the effect of passion on business growth is conditioned by factors outside the borders of the business (e.g., network connections and environmental factors) have not been examined in the literature. That is, while a few studies have examined the relationship between passion and business growth (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), it is not clear regarding the extent to which social processes and environmental factors outside the borders of the business may moderate the effects of entrepreneurial passion (and its domains) on business growth. This calls for scholarly effort to model the effects of contingencies on the relationship between passion (and its domains) and business growth. In particular, the paucity of research into the moderating role of entrepreneurial passion on business growth association in less developed market contexts is striking, since the literature indicates that the beneficial effects of individuals' passion may be context specific (e.g., Cardon et al., 2009a; Cardon et al., 2013). Accordingly, the present study examines the joint effects of entrepreneurial passion (and its domains), political ties and perceived environmental dynamism on business growth.

Consistent with Hmieleski and Baron (2009), the present study admits that the effects of individual-level variables occur through interactions with factors outside the borders of the business such as environmental factors and network ties. Indeed, prior scholarly studies in entrepreneurship (e.g., Shaver and Scott, 1991) and organisational behaviour (e.g., House,

Shane, and Herold, 1996) have been criticised for failing to adopt a contingency view. According to contingency scholars, in order to fully understand organisational processes such as business growth, it is essential to investigate variables at different level of analysis rather than trying to seek to describe only universal and direct relationships (Miller, 1996). Specifically, it has been suggested that the effects of individual-level variables occur through interactions with factors outside the borders of the business such as political connections and environmental factors (Hmieleski and Baron, 2009; Baron and Tang, 2011).

Yet, this contingency model is missing from scholarly research involving passion and business growth. In response to such critiques, the present study employs the contingency perspective to examine the moderating effects of environmental factors and network relationships outside the borders of the firm on the relationship between entrepreneurial passion and business growth. This study investigates the moderating influence of political ties and pereceived environmental dynamism on the association between entrepreneurial passion (and its domains) and business growth. Treating passion in this way provides an opportunity to examine a contingency model in the passion literature.

This study's effort yields a contingency view of entrepreneurial passion and provides a broad understanding of entrepreneurial passion. Specifically, this study contributes to the literature by examining these contingencies on the association between entrepreneurial passion and business growth. This study expands understanding surrounding the conditions in which passion is effective in enhancing business growth. Without a better understanding of these boundary conditions, scholars' effort to shed light on how much passion should be developed will be less understood. Scholars and policy makers would, therefore, benefit from examining the moderating role of pereceived environmental dynamism and political ties on the relationship between passion and business growth.

1.2.3 Examination of Passion from an Emerging Country Perspective

Research on the potential business growth benefits of passion are skewed to data originating in developed country settings. This makes the benefits of entrepreneurial passion in emerging market economies less understood. For example, passion has been closely linked to economic activities such as entrepreneurship in advanced countries (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), however to date, researchers do not know enough about the direct influence of entrepreneurial passion on business growth in emerging countries. The scarcity of academic endeavours in examining entrepreneurial passion and business growth in emerging country settings is rather surprising given the several constraints entrepreneurs face in emerging economies as opposed to the more advanced economies.

Entrepreneurial passion in emerging market economies is important for both scholars and policy makers because these economies represent a unique cultural setting where entrepreneurs face several constraints to growth (e.g., Moy and Luk, 2003; Tagoe et al., 2005; Robson and Obeng, 2008). Yet, scholarly insight of entrepreneurial passion in these economies is less established. For example, while studies from the Western World have examined empirically how passion relates to venture growth (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004) and venture capital investment decisions (Chen, Yao and Kotha, 2009), some of these studies may not generalise to emerging countries in general and Ghana in particular. This is because emerging countries exhibit different cultural, institutional, economic and socio-political environments (Hoskisson et al., 2000; Julian and Ofori-Dankwa, 2013). For example, in the developed economies, the market mechanisms for resource exchange are well advanced and the institutional environments are fairly stable. Conversely, economies of emerging or less developed market economies are characterised by high levels of uncertainty and market imperfections (Wright et al., 2005; Luo and Tung,

2007). This creates institutional voids and barriers to entrepreneurship in emerging economies (Acquaah, 2007; Robson and Obeng, 2008).

Additionally, emerging market economies are characterised by high levels of corruption because of presence of red tape and highly regulated environment (Adjibolosoo, 1995; Acquaah and Eshun, 2010). This presents several constraints in the business environment. Entrepreneurial passion becomes important in achieving venture success in challenging environments (Bird, 1988; Smilor, 1997) because passion helps entrepreneurs to push through when the going gets tough (Cardon et al., 2013). The high level of uncertainty in the business environment makes entrepreneurial passion important issue to investigate and thus may reflect a real option to make a strong case for examining the boundary conditions of entrepreneurial passion in a way that is not possible in other research contexts.Therefore, emerging economies in general and Ghana in particular provide a rich context to investigate the role of passion in business growth process as well as boundary conditions of such effects.

1.3 OBJECTIVES OF THE STUDY

As the main research gaps have been identified in the literature, it is important that the objectives of the study are clearly stated. The objective of this study is two-fold. First, this study investigates the degree to which entrepreneurial passion and its domains predict business growth. Second, the moderating effects of political ties and environmental dynamism on the association between entrepreneurial passion (and its domains) and business growth are studied. Thus, the main objectives are:

1. To examine the association between overall entrepreneurial passion and business growth;

2. To examine the potential moderating effects of political ties and environmental dynamism on the linkage between overall entrepreneurial passion and business growth;
3. To examine the relationship between the domains of entrepreneurial passion and business growth;
4. To explore the potential moderating effects of political ties and environmental dynamism on the relationship between the domains of entrepreneurial passion and business growth.

To achieve these objectives, Cardon et al's (2009a) three-domain model of entrepreneurial passion is used as a guiding framework. The choice of this framework lies in its acceptance as useful model for treating entrepreneurs' *experience* of passion (e.g., Laaksonen, Ainamo and Karjalainen, 2011; Breugst, et al., 2012; Cardon and Kirk, 2015). Thus, this study tests the three domains of entrepreneurial passion developed by Cardon et al., (2013) in an emerging country context. The use of the domains of entrepreneurial passion constitutes significant contribution to the entrepreneurial passion literature because existing scholarly studies on entrepreneurial passion is limited in depth and predominantly focused on entrepreneurial traits (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Thus, in achieving these objectives, this study makes four major contributions. The section that follows next discusses the major contributions from this study.

1.4 CONTRIBUTIONS FROM THE STUDY

In addressing the major gaps in the entrepreneurial passion and business growth literature, this study makes the following significant contributions.

1.4.1 Aggregate Model of Passion

As has been stated, this study examines the relationship between aggregate passion and business growth. Accordingly, the present study contends that an overall level of passion may enhance business growth. The study draws on Cardon et al's (2009a) model of entrepreneurial passion to argue that passion is an affective phenomenon which is experienced by individuals and how individuals report these experiences. Thus, this study argues that individuals' overall level of passion enables a firm to scan the environment, assemble the necessary resources, grow and expand the business (Cardon et al., 2013). A major argument is that passion can enhance creativity and the recognition of new information patterns crucial for business growth opportunities (Baron, 2008; Sundararajan and Peters, 2007; Baron and Tang, 2011; Cardon et al., 2013).

Moreover, scholars argue that passion is associated with entrepreneurs' proclivity to access funding from prospective investors (e.g., Cardon et al., 2009b; Mitteness et al., 2012; Sudek, 2006). Accordingly, researchers have advocated the need for distilling a clearer picture of the role of passion in entrepreneurial efforts (e.g., Cardon et al., 2009a; Chen, Yao and Kotha, 2009) and subsequent firm level outcome (e.g., Baum and Locke, 2004; Baron and Tang, 2011). Following this background, this study contends that individuals' overall level of entrepreneurial passion can enhance superior business growth.

A major theoretical contribution is the examination of entrepreneurs' *experience* passion (Cardon et al., 2009a; Cardon et al., 2013) and business growth as previous studies have treated passion as a trait variable (e.g, Baum and Locke, 2004). The benefit of examining passion from the *experienced* approach is that it enables scholars to draw conclusions and make recommendations about the effect of how entrepreneurs report the passion they experience (Cardon et al., 2013) on business growth.

This study found that overall level of passion weakly but positively relates to business growth. That is, the present study found that at 10% level of significance, passion relates to business success. Although, this study has produced weak result of overall passion, the result represents a significant revival of interest in the role of passion in firm level outcomes.

1.4.2 Disaggregate Model of Passion

This study contributes to the passion literature by examining the direct relationship between entrepreneurial passion domains (disaggregate model) and business growth. Thus, the present study examines the relationship between passion for inventing, passion for founding and passion for developing and business growth. Examining the association between each entrepreneurial passion domain and business growth helps to highlight the contribution of each domain to business growth. Indeed, the present study found that passion for founding and passion for developing foster business growth whilst passion for inventing works against business growth. Therefore, the finding that passion indirectly relates to venture success (e.g., Baum, Locke and Smith, 2001; Buam and Locke, 2004) requires further enquiry as the approach adopted in previous scholarly studies might conceal the real contribution of passion in business growth outcome.

1.4.3 Examination of Moderating Effects

A major contribution from this study is the inclusion of moderators on the association between entrepreneurial passion (and its domains) and business growth. Previous scholarly studies adopting individual level variables (e.g., Shaver and Scott, 1991) have been criticised for failing to examine moderating effects. By examining moderators of these associations, this study examines the factors outside the borders of the business that may change the strength and direction of the relationships between passion (and its domains) and

business growth. This is important given the results of previous studies (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004).

In this study, perceived environmental dynamism and political ties are examined as moderators of passion (and its domains). By studying the moderating role of environmental dynamism in enhancing the influence of entrepreneurial passion on business growth, this study contributes to the entrepreneurship literature that suggests that a firm's external environment might help to improve its growth and performance (e.g., Miller and Friesen, 1983; Eisenhardt, 1989). Moreover, the literature suggests that, political network relationships generated by entrepreneurs influence the firm's activities and growth. Thus, it is not only *what* you know that influences a firm's growth, but *who* the individual knows may be crucial in the business growth process (Acquaah and Eshun, 2010).

Additionally, although social capital theory is widely used as a rich theoretical milieu from which to investigate business growth outcomes, the passion literatute has not fully explored the role of political connections in passion's effect on business growth. This study adds to this body of literature by examining the moderating effects of political ties on the association between entrepreneurial passion (and its domains) and business growth. Studying these moderators helps to improve our knowledge of business growth outcomes regarding when entrepreneurial passion and its domains positively (or negatively) drive business growth.

The present study's findings suggest that political ties and perceived environmental dynamism moderate the relationship between overall level of passion and business growth such that the association is positive and significant. Thus, political ties and perceived environmental dynamism facilitate the successful translation of passion into improved business growth. Additionally, this study's findings indicate that political ties and

environmental dynamism facilitate the favourable conversion of passion domains (inventing, founding and developing) into enhanced growth outcomes. As has been argued, the passion literature has largely overlooked the role of network ties and environmental dynamism in coverting passion domains into successful growth outcomes. A major insight is the clarification of the conditions under which passion (and its domains) is more or less pronounced in business success.

1.4.4 Contribution to Entrepreneurial Practice

In terms of entrepreneurial practice, the clear lack of examination of the two research fields (i.e. experienced passion and business growth) suggests that there are no dependable bases for the benefits of developing entrepreneurial passion. Indeed, entrepreneurs in emerging countries face several constraints than their counterparts in developed economies. Therefore, to succeed, it is argued that entrepreneurs require passion to forge ahead (Bird, 1988; Smilor, 1997).

For entrepreneurship practice, there are a number of contributions to be derived from this study. First, this study suggests that overall level of passion weakly predicts business growth. Yet while two of the domains of passion contribute strongly to business growth, the other (passion for inventing) works against it. Therefore, managers and policy makers should be aware that prioritising all the domains of passion in entrepreneurship practice might not always lead to business growth. This is because not all of the domains of entrepreneurial passion work well for enhancing business growth. The results of this study show how the entrepreneurial passion domains jointly or individually operate on business growth. This means specific recommendations can be provided regarding when entrepreneurs can be expected to enhance business growth when they experience passion.

Second, this study suggests that entrepreneurial passion is more beneficial for business growth particularly when political network ties or environment factors are evident. Importantly, political ties may be needed to enhance the effects of entrepreneurial passion on business growth. Therefore, it is plausible to argue that high levels of environmental dynamism and political ties may be needed to enhance the effects of entrepreneurial passion and its domains on business growth.

Third, this study highlights the importance of passion to the success of an entrepreneur. This study supports the notion that entrepreneurial passion is not simply an innate trait (Markman, Baron and Balkin, 2003; Cardon and Kirk, 2015), instead a unique affective experience that reflects the entrepreneur's self-identity and the type of role he or she is engaged in (Cardon et al., 2009a; Cardon et al., 2013). This reveals the benefits of the study because entrepreneurship drives economic growth (David, 2007). Therefore, ''if entrepreneurial passion can be identified, harnessed and nurtured, a result may be an increased ability to encourage and nurture entrepreneurial efforts'' (Cardon and Kirk, 2015: 19).

Fourth, if entrepreneurs realise and understand the nature of the passion that drives their success, they may be in a better position to help harness it to enhance their goal pursuit (Cardon et al., 2009a). This study's results indicate that specific aspect of the entrepreneurial process that the entrepreneur identifies with and feels strong about are important, because it is this passion that determines who will scan the environment for new opportunities, who will assemble the necessary financial, human and social resources and who will grow and expand their businesses.

1.5 STRUCTURE OF THE THESIS

To achieve the objectives of the study, the thesis is structured in nine chapters as outlined in Table 1.1 below. Chapter 1 introduces the research study; addresses the research gaps, states the objectives of the study and discusses the main contributions from the study.

Chapter 2 examines the context of study's environment (Ghana). Particularly, the chapter looks at background information of Ghana, justification for the choice research context and the main sectors of the Ghanaian economy. Additionally, this chapter defines a small business in Ghana. Finally, this chapter examines the context of entrepreneurship and policies promoting small business development in Ghana.

In Chapter 3, relevant literature related to business growth is evaluated. Accordingly, this chapter focuses on scholarly studies in the area of business growth. Specifically, this chapter looks at the concept of small business growth, approaches to measuring business growth, theories of business growth, and the determinants of business growth. The chapter concludes with a summary.

Chapter 4 examines literature linked to entrepreneurial passion and its domains to business growth are further examined. Specifically, this chapter focuses on the concept of passion, and passion in entrepreneurship. Further, streams of entrepreneurial passion research are examined. The chapter concludes with a summary.

Chapter 5 of this study develops a conceptual framework for the thesis and discusses its hypotheses. Additionally, Chapter 5 explores the theoretical underpinnings of the study. With regards to the theoretical underpinnings of the study, the chapter explores the identity, regulatory focus, contingency and network capital theories as the main theoretical lenses for the study. It is argued that these theories can help explain the relationship between

entrepreneurial passion and business growth as well as the moderating effects of political ties and environmental dynamism.

Table 1. 1: Structure of the Thesis

CHAPTERS	RESEARCH TASKS
Chapter 1	Introduction to the study
Chapter 2	The Context of the Study-Ghana
Chapter 3	Business Growth
Chapter 4	Entrepreneurial passion
Chapter 5	Conceptual Framework and Hypotheses
Chapter 6	Research Methodology
Chapter 7	Descriptive Analysis and Item Assessment
Chapter 8	Hypotheses Testing and Study Results
Chapter 9	Discussion and Conclusion

With regards to the hypotheses development, this chapter followed four main procedures. These are: (1) the direct effect of overall entrepreneurial passion on business growth; (2) the moderating effects of political ties and environmental dynamism on the association between overall entrepreneurial passion and business growth; (3) the direct relationship between individual entrepreneurial passion domains and business growth; and (4) the moderating influence of political ties and environmental dynamism on the association between the domain elements of entrepreneurial passion and business growth.

Chapter 6 discusses the study's methodology. The chapter provides an overview of the various research designs, sampling techniques and survey data collection procedures. Additionally, this chapter discusses questionnaire administration procedures and survey bias evaluation.

Chapter 7 presents the descriptive analysis of the sample and discusses the results of purification of all items and scales used in this study. Further, chapter seven presents the procedures for item selection and item analysis using exploratory factor analysis (EFA).

Moreover, Chapter 7 presents the dimensionality and validity assessment procedures using confirmatory factor analysis (CFA). Finally, chapter seven assesses the normality of the variables used in the hypothesis testing.

Chapter 8 presents the regression techniques used to test the study's hypotheses and regression assumptions are explored. Further, Chapter 8 presents and discusses the results of the hypotheses tested.

Finally, Chapter 9 of the study presents discussion of the study's results as well as conclusions drawn from the results. Specifically, chapter nine summarises the key findings with regards to the study's objectives. Additionally, the chapter presents the theoretical, managerial and policy implications of the study results. The chapter concludes with a discussion of limitations and discusses opportunities for future research.

CHAPTER 2

THE CONTEXT OF THE STUDY-GHANA

2.1 INTRODUCTION

This chapter examines the context of study's environment. Specifically, the chapter presents background information of Ghana, justification for the choice of research context, the main sectors of the Ghanaian economy, definition of a small business in Ghana, the context of entrepreneurship in Ghana. This chapter also examines some policies promoting small business development in Ghana. This chapter concludes with a summary.

2.2 BACKGROUND OF GHANA

Ghana is located in West Africa, bordered by Togo to the East, Cote D'Ivoire to the West and Burkina Faso to the North. The results of the 2010 Ghanaian Population and Housing Census showed that the population of Ghana stands at 24,658,823 (Ghana Statistical Service, 2012). The results demonstrates that the population of Ghana increased by 30.4% over the 2000 population figure of 18,912,079. Ghana has a landmass of about 239, 460 square kilometres approximately the size of the UK (Obeng and Blundel, 2015) and the country lies just above the equator with a tropical climate and mean annual temperatures ranging between 26ºC and 29ºC (Ghana Meteorological Services Department, 2012). Ghana is endowed with rich natural resource including gold, diamond, oil, forest products and water resources. In 2007, Ghana discovered oil in commercial quantities; however, the development and production started in mid-2010.

2.3 WHY STUDY PASSION AND GROWTH IN GHANA

Ghana is particularly important context to test the study's hypotheses. Recent economic transformation policies have earned Ghana an enviable track record in sub-Saharan Africa

(Acquaah, 2007; Robson et al., 2012). As a developing country, Ghana has experienced rapid economic growth rates resulting from direct market-based activities of private enterprises and market friendly policies of successive Ghanaian governments (Chirango et al., 2011; Boso, Story and Cadogan, 2013). In addition, the country's stable democratic tradition and rule of law give Ghana a favourable investor confidence in the sub-region (OECD, 2008). Yet, the inadequate market support institutions and weak enforcement capacity of regulatory and legal institutions create business uncertainty that can be potentially reduced by entrepreneurs who can leverage their passion (Buame 1996; Acquaah 2007). In such a challenging environment passion becomes a central component of entrepreneurial motivation and success (Bird, 1988; Smilor, 1997) because passion helps entrepreneurs to get things done that are beyond the ordinary (Cardon et et al., 2013).

This study's suggestion is that the role of passion should be considered in this context because the process of founding and managing a business in a developing country requires the entrepreneur to invest a great deal of time and energy on emotionally-laden aims, since the institutional frameworks that support business initiative are weaker within developing countries. Interestingly, recent evidence suggests that entrepreneurs in Ghana face attitudinal and resource barriers to business growth (Robson and Obeng, 2008). Despite these constraints in the Ghanaian business environment, no systematic theoretical or empirical studies exist concerning the notion of passion and its influence on entrepreneurial activities. Ghana is, therefore, an important context to show how entrepreneurial passion of individuals of small private enterprises has supported growth activities in a developing economy.

2.4 THE MAIN SECTORS OF THE GHANAIAN ECONOMY

The Ghanaian economy is made up of three main sectors (ISSER, 2007; World Bank, 2013). These sectors are agriculture, service and manufacturing. Ghana has witnessed a substantial and monumental growth of its economy and has been able to reduced poverty substantially (Aryeetey and McKay, 2007; World Bank, 2013). The country is recognised as one of the best sub-Saharan African reformers (Coulombe and Wodon, 2007; Kolavalli et al., 2012). Ghana's GDP in 2009 positioned the per capita income of Ghanaians as the highest in West Africa and placed Ghana a low-middle-income country with per capita GDP of more than US$1,000 (Kolavalli et al., 2012). However, Ghana has recently turned to the International Monetary Fund (IMF) to bridge widening fiscal deficits and stem depreciation of the Ghanaian currency (IMF, 2014). This includes the implementation of monetary and fiscal reforms that are likely to change the Ghanaian business landscape. The sections that follow next, the main sectors of the Ghanaian economy are examined.

2.4.1 The Agricultural Sector

The agricultural sector is the mainstay of the Ghanaian economy. The agriculture sector contributes 39% to GDP and accounts for about 55% of employment (ISSER, 2007; World Bank, 2013). The main activities of the agricultural sector include crop farming and livestock farming. The sector is dominated by crop production. Cocoa has been seen as the most essential export crop. However, cocoa accounts for only 10%–15% of agricultural GDP, less than what root crops contribute to agricultural GDP (Kolavalli et al., 2012). Ghana's major exports commodities include cocoa, timber and pineapple.

In Ghana, lack of appropriate technology has been a major constraint to small farm holders and this appears to be the reason for the low productivity in the agricultural sector. Also, the over-reliance of the agricultural sector on natural rain for farming activities partly explains

the low productivity of the sector. Other problems the agricultural sector faces include poor access to credit, inadequate demand, high rate of inflation, poor infrastructural development. The infrastructural problems faced by the local farmers include lack of irrigation facilities, poor storage facilities, poor road network, high transport cost, high costs of utility charges and poor telecommunication networks (Robson and Obeng, 2008).

2.4.2 Service Sector

The service sector of Ghana is large and growing with a wide range activities such as (i) transport, storage and communication; (ii) the wholesale, retail trade, restaurants and hotels; (iii) finance, insurance, real estate and business services; (iv) government services; (v) community, social and personal services, and (vi) producers of private non-profit services (ISSER, 2007). According to ISSER (2007) the services sector is the second bedrock of Ghana's economy behind the agricultural sector. The recent rebasing of the economy revealed that the contribution of the services service sector to GDP has blossomed (Kolavalli et al., 2012). The Ghana Statistical Service (2012) indicated that between 1994 and 2010, the service sector grew at a rate of 5.9% annually.

In Ghana, public services and domestic-oriented private services dominate the service sector. According to the Ghana Investment Promotion Centre (GIPC) (2011), 109 businesses were recorded with an estimated value of $378.44 million for the first quarter of 2011. The service sector recorded the highest number of businesses, comprising 37 service sector organisations with an estimated value of $83 million. This appears to suggest that the sector is gradually gaining grounds in the Ghanaian economy. The service sector also faces several problems to the growth of the sector. This includes inadequate access to finance, inadequate demand, poor telecommunication networks and high tax and import duties.

2.4.3 The Manufacturing Sector

The manufacturing sector has been dominated by agriculture-related activities such as garments and textiles, food processing, soap and detergents, timber products, furniture, cement, metal, machinery and paper production (ISSER, 2007). The manufacturing sector witnessed only 3.2% annual growth between 1994 and 2012 (World Bank, 2013). This is the lowest compared with agricultural and service sectors of the Ghanaian economy. According to World Bank (2010) since 1988 the manufacturing performance has been abysmal in Ghana. Yet many scholars believe that domestic manufacturing in the Ghanaian economy is likely to transform the country's economy (e.g., Wolf, 2004; Agyeman-Duah, 2008). However, several opportunities in the manufacturing sector remain untapped. For example a major industrial cluster in Ghana (Suame Magazine) has not yet realised its full potential in automobile manufacturing activities (Agyeman-Duah, 2008).

Despite these challenges, the Government of Ghana has placed much priority to improving the small scale manufacturing sector to diversify the economy and reduce the export dependency as well as increase value-addition in the industry. Two main reasons have been identified as to why the government of Ghana has paid significant attention to its manufacturing sector. First, Kastner (2005) claimed that Ghana's unprocessed primary commodities contribute abysmally to the national economy in terms of foreign exchange earnings, employment generation, and firm level learning. Second, calls from Ghana's developing partners have suggested to the government of Ghana to make its manufacturing sector the prime focus of its socio-economic development agenda. There is evidence to suggest that the economic success chalked by most of the advanced nations has been mainly pioneered by the success of their manufacturing sector (Teal, 2008).

To facilitate value-addition and to improve the competitiveness of the small scale manufacturing sector, the Government of Ghana launched a new industrial plan in 2011. The Industrial Action Plan, which runs till 2015, has been designed to complement existing development strategies such as Ghana Shared Growth and Development Agenda (GSGDA). The plan aims to improve manufacturing value chain including domestic supply chain. The Industrial Action Plan also seeks to improve innovation and technology in small manufacturing firms.

However, it still remains unclear as to what policies can enhance sustained growth of the manufacturing sector in Ghana. For example, there is evidence to suggest that the import substitution policies adapted from the 1960s to the 1980s failed to inspire any hope in terms of growth in the manufacturing sector in Africa (Riddell, 1990). It is not clear whether the problem of the manufacturing sector has been as a result of protection or not. However, Teal (1999: 110) argued that the problems facing the manufacturing sector ‘‘have been identified as flowing from the extent and form of the protection’’. The growth of the sector has been hindered by lack of competition because of the use of quotas rather than tariffs. The failure of the policies of trade restrictions to enhance growth of the manufacturing sector has been recognised (Teal, 1999).

Apart from policy problems hindering the growth of the manufacturing sector, several other problems hinder the growth of the manufacturing sector. These include problems of networks, high electricity costs and high raw material. Also the manufacturing sector is hampered by high cost of utility charges, lack of industrial sites, high transport costs, low quality of electricity/water supply, poor telecommunication networks, high labor costs and high costs raw materials (Robson and Obeng, 2008; Yusof, 2010). Again, the manufacturing

sector has been challenged by massive influx of affordable imported manufacturing goods from countries such as China and India.

2.5 DEFINING A SMALL BUSINESS IN GHANA

Most Ghanaian businesses are very small compared with other countries (Mcdade and Maleck, 1997). According to Osei et al., (1993) majority of businesses in Ghana has employees size of 5 or fewer. For this reason, several definitions of what a small business constitutes Ghana have been developed in Ghana. The most commonly used criterion is the number of employees (Kayanula and Quartey, 2000).

The Ghana Statistical Service (GSS) categorised businesses with less than 10 employees as small businesses and businesses with more than 10 employees as medium and large sized enterprises (Kayanula and Quartey, 2000). On the other hand, the National Board for Small Scale Industries (NBSSI) in Ghana uses fixed assets and number of employees. NBSSI categorises businesses with not more than 9 employees and that has plant and machinery not exceeding 10 million Ghanaian Cedis as a small business.

The Ghana Enterprise Development Commission (GEDC) also puts small businesses in the upper limit definition for plant and machinery and uses 10 million Cedis as threshold. The criterion of using fixed assets poses a problem (Abor and Quarety, 2010). As pointed out by Kayanula and Quartey (2000), the Ghanaian currency has often been depreciated against major trading currencies and this often makes the definition problematic.

In this study, a small business is defined as any business that employs between 4-50 employees. In comparison with other measures of growth such as net assets and profits, employee size and sales indicators are seen as good indicators because owner-managers

easily remember them. Moreover, the number of employees is not affected by inflation (Mead and Liedholm, 1998).

Again, the use of number of employees to define small business seems appropriate because using other indicators such as net assets value to define small business brings difficulties in making comparison between enterprises because different methods of business valuation abounds. The high depreciation of the Ghanaian currency (the Cedi) and high rate of inflation make the use of sales inappropriate to define small business in Ghana. The use of number of employees is therefore suitable in measuring business growth in Ghana.

The study uses a minimum of 4 employees because the focus of this study is on both formal and informal manufacturing business of the economy. According to Steel and Webster (1992) any business which has less than 5 workers is assumed to be in the informal sector. Therefore, in order to capture both formal and informal businesses in the study, businesses employing not less than 4 employees and not more than 50 employees were selected. A cut-off point of 50 is used because the Government of Ghana's support services and private sector advisory services cover enterprises with a maximum of 50 workers and the government of Ghana recognises enterprises that have more than 50 employees as large organisations (Obeng, 2007; Robson et al., 2012).

The manufacturing sector was chosen for this study for the following reasons: (i) the manufacturing sector has been positioned by the government of Ghana as the main sector if it would achieve economic transformation (ISSER, 2007); (ii) The manufacturing sector's contribution to GDP is the lowest among Ghana's industry subsectors (Kolavalli et al., 2012); (iii) the manufacturing subsector faces several challenges including high costs of labour, high electricity costs, and high costs of raw materials (Yusof, 2010).

2.6 THE CONTEXT OF ENTREPRENEURSHIP IN GHANA

Entrepreneurial activities have being in existence before the arrival of the Europeans in the 15th century (Takyi-Asiedu, 1993). However, there have been limited attempts by the successive governments to develop the small firm sector (Asamoa, 1996; McPherson, 1996). Recent studies have expressed the need for government to support entrepreneurial activities in sub-Sahara Africa where many entrepreneurs operate in unstable political systems (World Bank, 2010).

With specific regard to Ghana, the business environment has changed substantially following the proclamation of a ‘‘Golden Age of Business’’ by the then John Agyekum Kuffuor’s Government in the year 2000 (Aryeetey and McKay, 2007). A set of incentives were instituted to promote and develop indigenous entrepreneurial activities. Some of these incentives include; low taxes, low interest rates, liberalisation of economic activities, tax rebates and long tax holidays.

Moreover, several institutions have been established by the government to regulate, promote and facilitate the development of small businesses. These include the National Board for Small-Scale Industries (NBSSI), Ghana Standards Authority (GSA); Export Development and Investment Fund (EDIF). There are also several Acts that support the development of small businesses. The Africa Project Development Facility has chronicled about 48 donor support programmes in Ghana (APDF, 2002).

Deapite these efforts, entrepreneurial activities have been notably slow. Several factors account for this situation including unfavourable government policies (McPherson, 1996; Robson and Obeng, 2008), socio-cultural factors (Takyie-Asiedu, 1993; Buame, 1996; Robson and Obeng, 2008) and lack of human and financial capital (Teal, 2008; McGrath and King, 1999; Robson and Obeng, 2008). There are several laws, regulations and rules

that impede the development of entrepreneurship. For example, in the World Bank (2013) *Doing Business Report*, (a World Bank study that provides ‘‘objective’’ measures of business regulations and their enforcement across 183 economies and selected cities at the sub-nations and regional level), covering the period of June 2008 through May 2009, Ghana placed 92nd in the world ranking of ease of doing business, down from the previous position of 87th in 2009. Further, Ghana placed 7th out of 44 economies in the ease of doing business rankings within sub-Saharan Africa.

On the individual indicators, Ghana placed 24th out of the 44 countries in the sub-Saharan Africa in the ease of starting a business, 32nd in dealing with construction permits, 27th in employing workers, 1st in registering property, 13th in getting credit, 5th in protecting investors, 14th in paying taxes, 5th in trading across borders, 5th in enforcing contracts and 16th in closing a business (World Bank, 2013).

In 2009, as part of Ghana’s administrative reform procedure, the registrar General’s Department (a government department mandated to register all businesses) developed a system that could facilitate the registration of a business within a day. The administrative reforms seem to have complicated registration procedures at the Registrar General’s Department as it takes more than 143 days to register a business in Ghana (World Bank, 2014). This suggests that there are several bureaucratic procedures to follow in order to get a business registered in Ghana. This brings high start-up costs for small businesses, including licensing and registration requirements. This in turn constrains small businesses by imposing unnecessary burdens on them (Lall and Pietrobelli, 2002; World Bank, 2014).

2.7 POLICIES PROMOTING SMALL BUSINESSES IN GHANA

2.7.1 Government and Institutional Support for Small Businesses

The idea of small business development in Ghana has been in existence since the 1970s (Kayanula and Quartey, 2000), however, the implementation of policies geared toward the development of the small business sector has not been encouraging. Despite this, key institutions have been set up to facilitate small business development. Recently, the small business sector has been redefined to develop local entrepreneurial skills needed for sustained industrialisation. The government of Ghana has put the following technical, institutional and financial support mechanisms in order to achieve its private-led development economic strategy. The sections that follow next discuss these technical, institutional and financial mechanisms.

2.7.1.1 Government Support

The government of Ghana has strengthened the small business sector's competitiveness through its policy framework. Several measures have been taken that aimed at strengthening the small business sector in contributing to employment growth.These measures includ the setting up of the Private Sector Advisory Group and the abolition of the Manufacturing Industry Act, 1971 (Act, 356).

The Export Development and Investment Fund (EDIF) was established in 1997 to offer financial suoport to small exporting firms in Ghana. The Ghanaian Budget Statement (1998) revealed that specific attention was given to textiles/garments, wood and wood processing, food processing industries which in turn could tap support from EDIF. This was done through EDIF which aimed at rationalising the tariff regime with the view to improving their export competitiveness (Kayanula and Quartey, 2000).

Additionally, several attempts have been made to close the skill gap in the small business sector through programmes aimed at skills training and registration of small business owners (World Bank, 2010). Through this initiative, small business owners are able to register for free skill training in the various skills training institutions such as the National Vocational and Training Institute (NVTI). This training is aimed at helping entrepreneurs develop basic management skills.

2.7.1.2 Government Institutions Supporting Small Businesses

During the 1970s institutions such The Office of Business Promotion, and Ghana Enterprise Development Commission were set up to aid entrepreneurs enter fields mainly dominated by foreigners. The Ghana Enterprise Development Commission was also established to strengthen small businesses capacity through financial and technical support. Additionally, the National Board for Small Scale Industries (NBSSI), Ghana Appropriate Technology Industrial Service (GRATIS) Foundation and the Rural Enterprises Project (REP) were established to aid small business development.

The NBSSI was established for the promotion and development of the small business sector in Ghana. The NBSSI supports small businesses with technical and advisory services through its regional Business Advisory Centres located in the ten regions of Ghana. The NBSSI has also established an Entrepreneurial Development Programme to train individuals or groups with entrepreneurial agendas. It offers training to small business owners on business planning, book keeping and other business advisory services.

Further, the GRATIS Foundation was established upgrade small business capacity through the transfer of appropriate technology to small scale businesses. The GRATIS Foundation promotes industrialisation through training. It was found to supervise the Intermediate Technology Transfer Centres (ITTUs) which has been changed to Regional Technology

Transfer Centres (RTTCs). With offices in nine regions in Ghana, the RTTSs provide short and long term training for small business owner-managers in areas such as textiles, pottery and soap making. The RTTCs also provide engineering services to small scale manufacturing and service industries engaged in vehicle repairs and vehicle repair services.

In addition, the Rural Enterprise Project (REP) was established to provide capacity building training to small business entrepreneurs in rural areas by improving the wealth and living conditions of these entrepreneurs. The REP provides services such as technology transfer, support for apprenticeship training and small financing scheme for entrepreneurs. The REP receives financial support from African Development Bank (AFDB), International Fund for Agricultural Development (IFAD) and Government of Ghana. There has been collaboration between the Rural Enterprise Project and institutions such as the NBSSI and GRATIS Foundation to provide support for small business growth and development in Ghana.

2.7.1.3 Financial Assistance to Small Businesses

Access to credit has been a major barrier to small business development in Ghana (Abor and Quartey, 2010; Robson and Obeng, 2008; World Bank, 2010). Strict collateral loan requirement makes it virtually impossible for small businesses to acquire loans from banks because most small businesses lack collateral to meet this requirement. To address this issue, the Government of Ghana and some donor agencies have put in place several financial programmes that seek to provide financial assistance to small businesses. Table 2.1 presents various government financial support agencies that offer financial assistance to small businesses in Ghana.

Table 2. 1: Government Financial Support Agencies

Financial Support Agency/Donor Agency	Function
Eximguaranty Company	Offers credit guarantees through lending financial institutions for loans. It contributes to enhancing the capacity of small business via modernisation of small business operations and expansion of their production capacity
Export Development and Investment Fund	Responsible for the facilitation, development and promotion of Ghanaian exports through provision of financial resources for exports.
Microfinance and Small Loans Centre (MASLOC)	MASLOC implements the Government of Ghana's microfinance programmes with the view to reducing poverty, creating jobs and wealth.
Micro, Small and Medium Enterprise Project	It promotes the competitiveness of Micro, Small and Medium Enterprises (MSMEs) through financial support
Business Sector Advocacy Fund (BUSAC)	Support small businesses to develop income generation activity through credit advancement
Ghana Venture Capital Trust Fund	The Venture Capital Trust Fund was established by ACT 680, 2004 by the Government of Ghana to provide low cost financing to SMEs. The Fund operates a scheme for equity investment of $25,000-$200,000 through five venture capital funds.
Ghana Private Sector Development Facility	A credit facility financed by the Italian government for Ghanaian private Small and Medium Enterprises (SMEs).

Source: Author's own compilation

2.7.1.4 Private Institutions Supporting Small Businesses

Enterprise promotion been a central objective to enhance economic development in sub-Saharan Africa (Chipika and Wilson, 2006; Obeng and Blundel, 2015). To achieve this feet, the government of Ghana recognises the small business sector as a major development partner if it would achieve its development agenda. The private sector has been facilitating

the development of small businesses by offering business development services for micro, small and medium enterprises with the view to making these businesses competitive and contributing to employment growth.

Support service provision by private institutions include quality assurance, information communication technology (ICT), book keeping and financial management, research and development, legal services, business planning, training, market research and sales. Table 2.2 provides service providers and the service mix of these organisations to small businesses.

Table 2. 2: Support Service Providers and Service Mix

Organisation	Service Mix
Support Programme for Enterprise Empowerment and Development (SPEED)	SPEED focuses on enhancing value chains in tourism and wood products, providing loans to non-banking institutions.
United States African Development Foundation (USADF)	The organisation gives grants to SMEs and non-governmental organisations to help improve management system and offering of advice on financial management to SMEs
Association of Ghana Industries (AGI)	The main services provided by AGI to SMEs include policy advocacy, information dissemination and trade promotion.
Empretec Foundation (Ghana)	Business advice for small businesses including training, financial management and book keeping, business planning and export support.
Ghana Tourism Federation (GHATOF)	The services provided by GHATOF include lobbying, advocacy, marketing and promotion of legislations on SMEs in the tourism industry.
Ghana Association of Consultants	The association offers business advice to small businesses in areas such as growth strategies, training, book keeping, financial management, marketing, research and development, businesses restructuring, and legal services

Source: Author's own compilation

2.7.2 Legal Instruments and Acts in Support of Small Businesses

Policy papers issued by the government of Ghana in support of the small business sector include The Investment Code 1985 (PNDC Law 116), the Export and Import Act, 1995 (Act 503), the draft Integrated Industrial Policy for Increased Competitiveness, the draft policy Paper on Micro and Small Enterprise Development, the Ghana Poverty Reduction Strategy Paper (2002-2004) and the Policies, Strategies and Action Plan (2002-2004).

There are other legal instruments, acts and papers that govern companies' operations in Ghana. The operations of companies in Ghana are governed by the Companies Code, 1963 (Act 179). Foreign businesses are allowed to register business in Ghana under Act 179. The Partnership Act, 1962 (Act 152) and the Business Name Act, 1962 (Act 151) provide the laws for partnership. The Business Name Act, 1962 (Act 151) makes provisions for sole proprietorship.

In addition, the Ghana Investment Promotion Centre (GIPC) Act, 1994 (Act, 478) was promulgated to provide international arbitration in disputes. Also the Act sets to make technology transfer agreements legally effective. With the exception of mining, petroleum, free zones and portfolio investments, all other investments must be established via the Ghana Investment Promotion Act, 1994. The Ghana Stock Exchange handles all portfolio investments.

Other Acts that seek to govern investment in Ghana include Ghana's Capital Investment Act 1963, the 1973 Investment Decree and Investment Code. These legal instruments seek to provide fiscal incentives for investors. Incentives include tax holidays for firms operating in sectors such as agriculture, rural banking and exports.

2.7.3 Regulatory Authorities in the Small Business Sector

In addition to the different Acts and support programmes, there are a host of regulatory bodies that have been mandated to direct and regulate the activities of businesses in Ghana. Table 2.3 below presents a list of regulatory bodies in the Ghanaian business environment.

Table 2. 3: Some Regulatory Bodies in the Ghanaian Business Environment

Regulatory Body	Act of Establishment	Mandate and Function
Ghana Free Zones Board	Free Zone Act 1995 (Act 504)	Tasked to assist investors to pursue investment in the free trade areas.
Food and Drugs Authority	Food and Drugs Act, 1992 (Act 199)	Regulates the manufacture, import, export distribution and advertising of food, drugs, cosmetics, and medical devices.
Ghana Investment Promotion Centre	Ghana Investment Promotion Centre Act, 1994 (ACT 478)	Initiate and support measures that will enhance the investment climate for both Ghanaian and non-Ghanaian companies.
Ghana Standards Authority	Standards Authority Act 1973, (ACT 198)	To promote standardization for the improvement of the quality of goods and certification of goods.
Registrar General's Department	Registrar General's Act, (Act, 50)	Mandated to register all business in Ghana. It also deals with trademarks
Ghana Revenue Authority	Ghana Revenue Authority Act, 2009 Act 791	Supervision and monitoring Authority of tax
Public Procurement Authority	Public Procurement Act 2003 (Act 663)	Provide for public procurement, make administrative and institutional arrangements for procurement and stipulate tendering procedures
Ghana Export Promotion Authority	Ghana Export Promotion Act, 1998 (Act 562)	To enhance the development and expansion markets for Non-traditional exports from Ghana.

Source: Author's own compilation

Some government's economic and regulatory policies have equally been identified as a source of constraint to small business growth. For example, Arhtur (2003) observed that the liberalisation policies under the structural adjustment programmes increased foreign competition that led to increasing number of firms turning to the informal sector. As indicated by Smallbone and Welter (2001a), government legislation has a different impact on firms of different sizes. Legislations which demand the preparation and delivery of documents where expert assistance is needed create compliance costs which will probably pose a greater burden for SMEs, since they do not usually have such resources on their payroll. The Government of Ghana continues to expect that, with such an array of actors in the small business sector, significant progress would be recorded in small business development. However, this expectation has not been realised.

2.8 CHAPTER SUMMARY

This chapter has examined the context of study's environment (Ghana). Particularly, the chapter looked at background information of Ghana, justification for the choice research context, the main sectors of the Ghanaian economy, definition of small business in Ghana, the context of entrepreneurship in Ghana, and policies promoting small business development in Ghana. Ghana's record in promoting the small business sector was not impressive in the 1960s until recently. A recent effort by Ghana to promote the small business sector has earned her a commendation by World Bank (World Bank, 2010). For example, the World Bank (2010) indicated that Ghana is one of the few less developed market economies to have reduced severe hunger from 34% in 1990 to less than 9% in 2010. The main sectors of the Ghanaian economy are the agriculture, service and manufacturing. Several policies have therefore been put in place by the Ghanaian government to grow and develop these sectors. This chapter has revealed that the Ghanaian government is predominantly interested in private sector manufacturing activities. Policies

towards small business development show that much attention has been paid to the manufacturing sector.

PART II: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

CHAPTER 3

SMALL BUSINESS GROWTH

3.1 INTRODUCTION

Small business growth is important to scholars, practitioners and policy makers because fast growth firms contribute to job creation, innovation and drive economic growth (Carter and Jones-Evans 2006, Audretsch et al., 2009). If small firms grow in size, they would contribute more to economic growth and poverty reduction (Mano et al., 2012). However, in considering the question of how small businesses achieve growth, it is vital to indicate that most of them do not grow (Davidsson, Achetenhagen and Naldi, 2005). For those who grow, smaller and younger businesses are likely to achieve organic growth than larger businesses (Davidsson, Delmar and Wiklund, 2006).

Given the increasing level of constraints to growth, especially in developing countries, business growth has become a major issue in entrepreneurship (e.g., Mead and Lieadholm, 1998; Moy and Luk, 2003; Robson and Obeng, 2008; Mano et al., 2012). Consequently, scholars have focused on understanding what drives business growth (e.g., Davidsson and Wiklund, 2000; Gilbert, McDougall and Audretsch, 2006; Delmar and Wiklund, 2008). A major insight from previous studies is that, the firm, individual and environment predict business growth (e.g., Smallbone and Wyner, 2000; Dobbs and Hamilton, 2007). This chapter, therefore, reviews literature on business growth. Specifically, this chapter considers the concept of small business growth, measures of business growth and theories of business growth. Moreover, this chapter investigates modes of business growth and determinants of business growth. Finally, a summary of the chapter is provided. This chapter starts by examining the concept of business growth.

3.2 THE CONCEPT OF SMALL BUSINESS GROWTH

Entrepreneurship and strategy scholars have studied business growth for a number of years. As such, business growth constitutes one of the central topics of entrepreneurship research (e.g., Delmar, 1997; Davidsson and Wiklund, 2000; Delmar, Davidsson and Gartner, 2003, Barringer et al., 2005; Gilbert, McDougall and Audretsch, 2006; Delmar and Wiklund, 2008; Shepherd and Wiklund, 2009; McKelvie and Wiklund, 2010; Fafchamps et al., 2014; Federico and Capelleras, 2015). Despite this substantial scholarly interest in business growth, theoretical development has been notably slow (Delmar, 1997; Davidsson and Wiklund, 2000; McKelvie and Wiklund, 2010) making it difficult to distil a clearer picture of the small business growth phenomenon (Storey, 1994; Ardishvili, et al., 1998; Wiklund, 1998). Extant reviews have accounted for this negative status quo in growth research (e.g., Weinzimmer, Nystrom and Freeman, 1998; Davidsson and Wiklund, 2000; MacPherson and Holt, 2007; Coad, 2007; Shepherd and Wiklund, 2009; McKelvie and Wiklund, 2010).

This difficulty has been attributed to how scholars approach the theoretical and epistemological issues and interpretations; operationalisation; empirical contexts; modelling and analysis of the small business growth literature (Davidsson, Achtenhagen and Naldi, 2010). There is however, a general consensus that business growth is a complex, ‘‘multidimensional’’ phenomenon in the literature (Scase and Goffee, 1989; Delmar, Davidsson and Gartner, 2003; Barringer et al., 2005). Indeed, notable attempts have been made to conceptualise small business growth in the literature. For example, Penrose’s (1959) Theory of the growth of the firm discussed growth as process and change in amount. Others have also looked at the heterogeneity of growth (e.g., Delmar, Davidsson and Gartner, 2003). The section that follows next explains ways in which business growth is measured.

3.3 MEASURING BUSINESS GROWTH

Measuring business growth has generated diverse views (e.g., Birley and Westhead, 1990; Weinzimmer, et al., 1998; Delmar, 2000; Shepherd and Wiklund, 2009; Achtenhagen, Naldi and Melin, 2010). As such, different measures of growth have been employed in the literature (e.g., Delmar, 1997; Wiklund, 1998; Ardishvili et al., 1998; Davidsson and Wiklund, 2000; Delmar, Davidsson and Gartner, 2003; Barringer et al., 2005; Delmar and Wiklund, 2008). These measures offer particular advantages and disadvantages in distilling the picture of the phenomenon of growth (Delmar, 1997). Yet, there seems to be a controversy in the literature as to which indicator is appropriate in measuring business growth (Weinzimmer et al., 1998; Mckelvie and Wiklund, 2010). The concept of business growth has been measured in terms of absolute or relative changes in productivity, employment, sales, assets, profits and profit margins (e.g., Storey, 1994; Wiklund, 1998; Delmar, 1997; Ardishvili et al., 1998; Davidsson, Steffens and Fitzsimmons, 2009; Allinson et al., 2006; Shepherd and Wiklund, 2009).

There is a growing consensus of the use of sales as a measure of growth over a time period of 5 years in the literature (e.g., Miller, 1987; Dunne and Hughes, 1996; Ardishvili et al., 1998; Weinzimmer et al., 1998; Barringer et al., 2005; Barkham, Gudgin, Hart and Hanvey, 1996). A major conclusion is that sales often precede other indicators (Flamholtz, 1986). For example, it is the increase in sales that calls for increase in assets and employees which leads to higher profits or market share (Flamholtz, 1986; Davidsson, Steffens, and Fitzsimmons, 2009). Other researchers contend that sales can be measured with ease across various countries and industry and also the preferred measure for business owners (e.g., Hoy, McDougall and Dsouza, 1992).

Business growth has also been measured using employment (e.g., Delmar, 1997). Scholarly studies mostly use relative employment growth over a three year period (e.g., Zahra, 1993; Vaessen and Keeble, 1995; Peters and Brush, 1996). According to Davidsson and Wiklund (2000) employment as an indicator of growth is highly relevant to policy makers because policy makers tend to focus on employment than sales growth of businesses within an economy. Yet, because some businesses employ an outsourcing strategy, employment growth is not always highly related to sales growth (e.g., Delmar, Davidsson and Gartner, 2003; Chandler, McKelvie and Davidsson, 2009; Shepherd and Wiklund, 2009).

This study focused on sales and employment growth only, for the following reasons. First, sales and employment measures have been used extensively in the empirical growth studies (Delmar, 1997; Delmar, Davidsson and Gartner, 2003). Second, other measures of growth offer some deficiencies that make their applicability difficult in the context of this study. For example, the use of total asset value is highly associated ‘‘to the capital intensity of the industry and sensitivity to changes over time’’ (Delmar, Davidsson and Gartner, 2003: 193).

Notwithstanding the several advantages associated with the use of multiple indicators, a major shortcoming of the use of multiple indicators is that the assumption of common cause may be incorrect (Delmar, Davidsson and Gartner, 2003). Further, some scholars are of the view that different growth measures and calculations of business growth influence model building and theory development differently and advocate for the use of a single measure of business growth (Chandler and Hanks, 1993; Delmar, 1997; Weinzimmer et al., 1998; Federico and Capelleras, 2015; Beck, Lu and Yang, 2015).

The use of multiple measures can account for variations in model testing and theory development (Weinzimmer et al., 1998; O’Cass and Sok, 2014). There appears to be no consensus or a universally accepted measure of business growth and inculcating multiple

measures is likely to provide a complete picture of business growth. Further, the use of multiple measures is likely to provide a way to test the robustness of any theoretical model (Delmar, Davidsson and Gartner, 2003). Table 3.1 summarises empirical studies and the ways growth is conceptualised. As can be seen from Table 3.1, sales and employment have been used consistently in measuring business growth in the literature.

Table 3. 1: Summary of Studies Measuring Business Growth

Author(s)	How growth is measured	Time-frame of the study (in years)	Sample size
Beck, Lu and Yang (2015)	Sales	1	344
Capasso, Treibich and Verspagen (2015)	Employment	4	13,236
Garcĭa-Posada and Mora-Sanguinetti (2014)	Sales and employment	8	2,861,174
Arregle et al., (2015)	Sales	2	515
Federico and Capelleras (2015)	Sales	14	926
Fafchamps et al., (2014)	Profits	4	781
O'Cass and Sok (2014)	Sales, profit, customer satisfaction and financial growth	1	171
Obeng, Robson and Haugh (2014)	Employment	0.6	441
Mai and Zheng (2013)	Market share	2	905
Schoonjans, Cauwenberge and Bauwhede (2013)	Employment, net assets, and added value growth	5	108,241
Didier and Schmukler (2013)	Total assets, sales and employment	20	214,271
Hamelin (2013)	Sales	6	22,237
Anderson and Eshima (2013)	Sales, employment and market share	1	207
Rahaman (2011)	Sales and employment	10	52140

Source: Author's own compilation

Table 1 (Continued)

Author (s)	How growth is Measured	Time-frame of study	Sample size
Barringer, Jones and Neubaum (2005)	Sales and Employment	3	100
Chandler and Baueus (1996)	Sales	1	66
Bacchetti and Trovato (2002)	Financial growth	8	4000
Carpenter and Petersen (2002)	Total assets	3	372
Davidsson and Delmar (1997)	Employment	1	11,748
Delmar, Davidsson and Gartner (2003)	Sales and Employment	1	11,748
Freel and Robson (2004)	Employment	3	1,347
Glancey (1998)	Employment	1	38
Davidsson and Henkerson (2002)	Employment	1	8,173
Kelley and Nakosteen (2005)	Sales Revenue	11	67
Kangasharju (2000)	Employment	7	26,057

Source: Author's own compilation

Table 3.1: (Continued)

Author (s)	How growth is Measured	Time-Frame of study (Years)	Sample Size
Johnson, Conway and Kattuman (1999)	Employment	2	75
Littunen and Tohmo (2003)	Sales growth	7	200
Locke (2004)	Employment	1	170
North and Smallbone (2000)	Sales and Employment	5	1,050
O'Gorman (2001)	Sales Turnover and Employment	20	2 (Longitudinal study)
Yasuda (2005)	Employment	6	14,000
Robson and Obeng (2008)	Employment	0.6	500
Wiklund and Shepherd (2003)	Employment and sales	3	326
Pena (2002)	Employment, sales and profit	1	119
Reichstein and Dahl (2004)	Sales Turnover and employment	1	9,000
Donaldson (1987)	Sales	3	48
Christman and Leslie (1989)	Sales	1	86
Kazanjian (1988)	Sales	1.5	71

Source: Author's own compilation

Table 3.1: (Continued)

Author (s)	How Growth is Measured	Time Frame of study (Years)	Sample Size
Davidsson (1991)	Sales and employment	3	322
Miller and Friesen (1983)	Sales and profit	5	86
Miller and Toulouse (1986a)	Sales	5	97
Orser, Hogarth-Scott and Riding (2000)	Sales	2	1004
Olson and Bokor (1995)	Sales	5	91
LeBrasseur and Zanibbi (2003)	Sales	2	145
Dess and Davis (1984)	Sales	1	22
Hamilton and Shergill (1992)	Sales, EPS, dividends and assets	11	67
Nkomo (1987)	Sales	5	264
Morrison and Roth (1992)	Sales	3	306
Weinzimmer, et al., (1998)	Sales and employment	5	193

Source: Author's own compilation

3.4 THEORIES OF SMALL BUSINESS GROWTH

Small business growth has received much attention from scholars in the small business literature (e.g., Storey, 1994; Smallbone and Wyer, 2000; Davidsson et al., 2002; Yasuda, 2005). Studies have attempted to explain the dynamics of small business growth (e.g., Hanks and Chandler, 1992; Hanks et al., 1993) and factors influencing small business growth (e.g., Orser et al., 2000; Sleuwaegen and Goedhuys, 2002; Davidsson et al., 2002; Obeng, Robson and Haugh, 2014). A major conclusion is that most small firms do not grow (Coad, 2007). However, existing literature indicates that various theories that predict small business growth have been sparse and scattered (Garnsey, 1998). For example, Davidsson et al., (2002:1) described economic theories that predict small business growth as 'crude and contradictory'. The reason may be that the literature is broad in scope (McMahon, 1998) and not confined to a single discipline.

Similarly, Penrose (1959; 1995) indicated that many factors influence the growth of small businesses and as such it is difficult to explain small businesses growth with a single one-size-fits all model. Theories of business growth can be broadly divided into two (i) integrated models-theories that explain the factors that drive business growth and (i) stage models-theories which view business growth as a series of phases or stages of development through which a business must pass in its life-cycle.

3.4.1 Integrated Models of Business Growth

Several theories have been proposed to examine small business growth and these include Gibrat's (1931) law of proportionate effect, Penrose's (1959) resource-based perspective, Jovanovic's (1982) learning theory, Storey's (1994) growth determinants model, Davidsson's (1991) growth determinants model and Wiklund's (1998) growth model. These theories have received much validity assessment in both advanced economies (e.g.,

Weinzimmer et al., 1998; Davidsson and Wiklund, 1999; Orser et al., 2000; Stam, 2010; Wiklund et al., 2009) and less developed market economies (e.g., Masakure et al., 2009; Obeng, Robson and Haugh, 2014). A point of convergence of these theories is that internal and external factors affect business growth. Notwithstanding the fact that a large body of research on business growth theories have been conducted, there seems to be a controversy as to which theory is appropriate in predicting business growth (e.g., Delmar, Davidsson and Gartner, 2003; Barringer et al., 2005; Delmar and Wiklund, 2008; Weinzimmer et al., 1998; Mckelvie and Wiklund, 2010).

A major concern for scholars regarding the integrated models of business growth is that, it has become difficult to adequately explain why some small businesses grow while others fail (Achtenhagen, Naldi and Melin, 2010). This may be due to the complexity of the problem, the multidisciplinary nature of the related variables used in explaining integrated growth models. The section that follows next discusses the life-cycle and stage models.

3.4.2 Life-Cycle and Stage Models

Apart from scholarly attempts to examining the factors that influence business growth, there is a growing body of literature that is concerned with growth processes. These models are often presented in the form of life cycle or stage models that encompass the entire lifespan of a business (e.g., Greiner, 1972; Churchill and Lewis, 1983; Gill, 1985; Scott and Bruce,1987; Kazanjian, 1988; Kazanjian and Drazin, 1989; O'Farrell and Hitchens, 1988a; Steinmetz, 1969; Gibb and Davies, 1990a; Hanks, 1990a, 1990b; Hanks et al., 1991; Dodge and Robbins, 1992; Hanks et al., 1993; Hanks and Chandler, 1994; Barringer et al., 2005). According to Kimberly and Miles (1980) organisations are born, grow and decline. These have been referred to as life-cycle models. This raises contentious issues in economics, management and sociology because not all organisations pass through this cycle (Penrose,

1952; Kimberly and Miles, 1980; McMahon, 1998). These models attempt to explain the dynamic nature of growth of businesses.

The main difference between life-cycle models and stage models is that, whilst life-cycle models represent a cycle of emergence, growth, maturity and decline (Whetten, 1987; Adizes, 1989; Davidsson, Achtenhagen and Naldi, 2010), stage models focus on the problems encountered by small businesses (e.g., Kazanjian, 1988; Walsh, 1988; Moy and Luk, 2003).

Stage or developmental models consider mainly the business's development process (emergence, growth, maturity and decline) and the generic problems businesses go through during growth. Stage models show that there are certain problems associated with each stage of business growth and these problems are different at each stage of the business's development (Olson, 1987; Kazanjian, 1988; Walsh, 1988; Moy and Luk, 2003). It has been suggested that it crucial to overcome these obtables at each stage so that mall businesses can move through different stages in order to achieve growth (O'Gorman, 2001). Yet, a growing body of scholarly enquiry suggests that researchers must pay attention to the heterogeneous patterns of growth outcomes (e.g., Delmar, Davidsson and Gartner, 2003). This indicates that the major focus of entrepreneurs tends to be mediated by different factors leading to numerous growth paths.

Of the models discussed so far, the work of Hanks et al., (1993) appears to be most suitable for explaining business growth. The reason is that, the model provides evidence to suggest that with reference to increasing age and size, there is a sequential progression of organisations through the stages in the evolvement and development of enterprises. Similar assumption has been raised by Kazanjian and Drazin (1989), conceiving that there is a sequential progression of enterprises through stages as they evolve. Although, Hanks et al.,

(1993) suggested some limitations such as being based on one particular industry and geographic setting, their study represents one of the most significant attempts in explaining research-based stage models. This is because their study represents an important attempt to situate stages of enterprise life-cycle in empirical observation.

3.4.2.1 Critique of Stage/Life Cycle Models

While stage or life-cycle models provide much insight into the nature of business evolution and potential obstacles likely to be faced by businesses, such models suffer certain pitfalls (e.g., Birley and Westhead, 1990; Gibb and Davies, 1990a; Dodge and Robbins, 1992; Moy and Luk, 2003; Dobbs and Hamilton, 2007; Phelps et al., 2007). These pitfalls range from their methodological approach to their inconsistencies in defining the types of obstacles likely to be faced at different stages of the life-cycle models. For example, the models have no explicit definition in the literature and no effort has been made to distinguish between life-cycle, growth stages or development stages (Hanks et al., 1993). Moreover, external obstacles dominate in the early stages of the life-cycle of organisations while internal problems are seen at later stages in the organisation (Dodge and Robbins, 1992). However, certain obstacles tend to persist across several stages and scholarly studies have made no attempt to broaden our understanding as to why these obstacles exist.

The stage models have exclusively focused on what businesses do and fail to account for environmental influences on business activity and performance. Empirical test of life-cycle model by Hanks et al., (1993) suggested that it is difficult to discriminate between phases. This can be problematic in measuring growth at different stages of business development. Indeed, scholarly thought suggests that stage models of growth only show the symptoms of growth and do not reflect the underlying causes of growth (O'Farrell and Hichens, 1988a).

3.5 MODES OF SMALL BUSINESS GROWTH

Another way to tackle the problem of small business growth is to examine modes of growth. Small businesses grow in a number of ways including internal organic growth (e.g., organic and acquisitions) and external growth (e.g., internationalisation or multiple locations). Scholarly enquiry suggests that entrepreneurs tend to embark on different forms of growth based on their wider motivations (Delmar, Davidsson and Gartner, 2003). For example, entrepreneurs of acquired businesses are more likely to embark on high growth than owners of independent businesses. In the sections that follow next, modes of growth of small business are discussed.

3.5.1 Organic Growth vs Acquisitions

Growth through acquisitions depicts a strategy in which a firm buys another firm or business (Park and Jank, 2010). Penrose (1959) has shown the existence of different routes to growth, notably organic growth versus growth by acquisitions. Her seminal work highlighted that organic growth can be limited by three factors: internal factors (e.g., managerial ability), external factors (e.g., product or factor markets) and a combination of internal and external factors (e.g., risk or uncertainty).

Regarding individual and strategy related factors, Penrose (1959) suggests that organic growth does not take place automatically, but depends on growth opportunities in the market and specialised resources and managerial abilities in order to plan and allocate the resources efficiently. For example, businesses that want to grow organically may embark on specialised technological training that can enhance their operational strength. The new skills acquired by the employees can provide additional value to the existing operational capacity of the business which in turn allows the business to grow its market. Yet if the business fails

to grow, this experience and knowledge will remain untapped (e.g., Davidsson, Achtenhagen and Naldi, 2010).

Penrose (1959) has espoused several arguments for explaining why firms might decide to acquire existing businesses for growth. When entering into new markets, the costs as well as managerial and technical difficulties could be reduced by acquiring another business. Thus, using acquisition strategy small businesses are likely to overcome market difficulties. Accordingly, Penrose (1959:129) highlighted that ‘‘thus the existing resources of a firm will not only limit the extent to which successful expansion can be effected through acquisition, but will also influence the direction of external expansion’’.

A growing body of scholarly enquiry suggests that motives behind acquisitions include market-access, expansion; diversification; sustainable competitive advantage; response to revolutionary change in the industry; and/or acquisition of knowledge of other businesses, firms and industries (UNCTAD, 2000; Deiser, 1994; von Krogh et al., 1994; Kruger and Muller-Stewens, 1994; Lockett et al., 2011). Acquisitions can be defensive strategy aimed at protecting market share in a declining or consolidating industry. The rationale behind acquisition may be to help the acquirer attain its strategic goals more quickly and inexpensively than if the business acted on its own. Such moves may help the small business to overcome obstacles associated with competition and market difficulties.

Research on the effects of acquisitions on business growth has produced mixed results. Whiles several scholars have reported a negative relationship between acquisitions and business growth (e.g., Mueller, 1985; Odagiri and Hase, 1989; Cosh et al., 1989), other scholars have reported a strong positive relationship between the two concepts (e.g., Taketoshi, 1984; Park and Jank, 2010). However, acquisitions foster substantial benefits because they offer faster growth than internal growth (Park and Jang, 2010).

It has also been established that acquisitions allows businesses to acquire tangible and intangible assets (Penrose (1959) and that the outcomes of acquisitions enhance flexibility, leverage competencies, share resources, and create opportunities (Marks and Mirvis, 2001). This may help alleviate managerial constraints which can enhance business growth.

3.5.2 Growth through Networks and Alliances

Several researchers have developed typologies of networks (e.g., Knoke and Kuklinsky, 1983; Aldrich and Zimmer, 1986; Melin, 1987; Johannisson, 1987; Uzzi, 1997; Lechner, Dowling and Welpe, 2006). Further, a number of empirical studies have indicated that networks lead to business growth (Donckels and Lambrecht, 1995; Hansen, 1995; Grabher and Stark, 1997b). For example, in the field of economic sociology, the effect of network ties on business growth has been established (Grabher and Stark, 1997b). It has also been established that entrepreneurs acquire knowledge, especially in the knowledge intensitive industry through external networks (Yli-Renko, Autio and Sapienza, 2001). Existing research suggests that networks offer the platform for a collective learning process in which ideas related to business development are exchanged and further developed (e.g., Kale et al., 2000; Hardy, Philips and Lawrence, 2003; Kitching, 2008). Conclusively networks, alliances and joint ventures are crucial for high growth firms (e.g., Killing, 1978; Roberts and Berry, 1985; Blundel, 2002; Street and Cameron, 2007; Watson, 2007). Thus, the evidence points to the role of networks and alliances in enhancing small business growth.

3.5.3 Growth through Internationalisation

Internationalisation strategy for growth is one of the most complex strategies in management and strategy. The major aim for adopting internationalisation is to counter the local market inefficiencies and obtacles in the local business environment. The expansion of small businesses is viewed as an entrepreneurial act because it involves the setting-up of

product markets (Thorelli, 1987; Ibeh, 2003). A growing body of literature exists on the internationalisation process of small businesses (e.g., Andersen, 1993; Leonidou and Katsikeas, 1996; Westhead, Wright and Ucbasaran, 2001; Ibeh, 2003). For example, it has been suggested that the way to understand internationalisation is a consequence of the resources that the firm held (Westhead, Wright and Ucbasaran, 2001).

The route to internationalisation involves a series of incremental 'stages' with exporting as an initial route to internationalisation. As such, internationalisation can be seen as a part of a firm's growth and development strategy because it involves cross-border and market related activities (Jones, 1999). This resonates with Penrose's (1959: 1) fundamental meaning of growth who argued that ''an increase in size or an improvement in quality as a result of a process''.

It has been established that internationalisation growth strategy involves exporting, foreign direct investment (FDI) and alliances (Lu and Beamish, 2001). Engaging in exporting allows businesses to commit greater resources to foreign markets and focus on countries that are ''psychically'' distant (Bell, Crick and Young, 2004). Yet internationalisation requires businesses to commit huge sums of resources to it, making it difficult for small businesses that lack such resources.

In his seminal work, Ansoff (1965) developed a product-market matrix that identifies new market development, also referred to as internationalisation as a forward looking strategy for fast small business growth. Accordingly, small business may regard international market as secondly to the domestic market activities. Thus, domestic markets and international markets are often viewed as divergent strategic options rather than complementary strategies for growth (Bell, Crick and Young, 2004). Resource constraints may also stop small firms from entering the international market (Carson et al., 1995).

Interestingly, research on internationalisation as a route to growth acknowledges that the process of growth not always unidirectional (Davidsson, Achtenhagen and Naldi, 2010). Rather, scholarly studies directs out attention to how businesses reduce their international activities or withdraw from international operations (Benito and Welch, 1997). According to Davidsson, Achtenhagen and Naldi (2005) scholarly enquiry into international growth of new and small businesses has so far not yielded many strong generalisations. Therefore, a major avenue for future research is internationalisation as route to growth.

3.6 DETERMINANTS OF SMALL BUSINESS GROWTH

The extant literature that classifies external and internal factors that influence small business growth has categorised them in different ways. For example, some previous studies have differentiated between the individual and environmental variables that influence small business growth (e.g., Ronstdat, 1984; Bygrave, 1994). For example, Storey (1994) categorised variables that affect small business growth under three broad headings namely: the entrepreneur, characteristics of firm and strategy of the firm. Storey (1994) indicated that these categorisations are based on starting resources of the entrepreneur, characteristics of the business and the strategy developed by the business. Table 3.2 presents Storey's (1994) classification of factors that affect business growth.

Storey (1994) identified key variables to each component and advanced the importance of combining all the components appropriately for rapid growth to take place. Each component provides a unique offering; the entrepreneur can be recognised prior to start-up, the business manifests decisions made on start-up while strategy reflects its growth rate. However, exact prediction is vital to the entrepreneur than historical accounts. A major problem with Storey's (1994) mechanistic approach is that it contributes little to provide the chemistry that puts together these perspectives for growth to occur.

Table 3. 2: Storey's (1994) Variables Influencing Small Business Growth

Entrepreneur	Firm	Strategy
Motivation	Age	Workforce Training
Unemployment	Sector	Management training
Education	Legal form	External Training
Management Experience	Location	External Equity
Number of Founders	Size	Technology
Prior self-employment	Ownership	Market positioning
Family History		Market Adjustments
Social marginality		Planning
Functional Skills		State Support
Training		New products
Age		Management Recruitment
Prior Business failure		Customer Concentration
Prior Sector Experience		Competition
Prior Firm size Experience		Information and advice
Gender		Exporting

Source: Storey (1994)

The issue here is to determine whether internal influences such as owner-managers' growth aspirations matter or whether external variables matter in determining small business growth. Moreover, Storey's (1994) variables are all individually and empirically derived variables that have consistent impact on growth but there is no suggestion of which combination of factors is important.

A review of the literature suggests that growth is to some extent an issue of willingness and skill, but basic enablers and constraints in the environment cannot be ignored. Thus, existing studies have concluded that business growth is influenced by many factors including the management strategies, characteristics of the entrepreneur, environment/industry specific factors and characteristics of the business (Davidsson et al., 2006; Dobbs and Hamilton, 2007; Smallbone and Wyner, 2000). However, this classification is not new as many of the elements in this classification have been professed in previous studies (e.g., Storey, 1994; Smallbone and North, 1995; Barkham et al., 1996; Baum, Locke and Smith, 2001; Delmar,

Davidsson and Gartner, 2003; Wiklund and Shepherd 2003; Edelman et al., 2005; Smallbone and Wyer 2006; Street and Cameron, 2007). However, a major conclusion that can be derived from prevailing scholarly reviews is that business growth is influenced by a number of internal and external factors.

With regards to external facrors, the population ecology perspective suggests that small businesses are influenced by factors outside the borders of the business (Hannan and Freeman, 1977) and these factors could be located around the structure of industries and markets. Previous research indicates that there is a rapid growth of businesses in dynamisc industries and regions (Davidsson and Delmer, 1997; Carroll and Hannan, 2000). Thus, there is a convincing evidence to suggest that business growth is externally determined to some extent.

In terms of internal factors, several factors have been suggested cited in the entrepreneurship literature. For example, firm strategy (e.g., Olson and Boko, 1995; Bamford, Dean and McDougall, 1997; McMahon, 1998; Freel and Robson, 2004; Wiklund and Shepherd, 2005), characteristics of the entrepreneur (e.g., Davidsson, 1989a; Storey, 1994; Smallbone and Wyer, 2000; Baum and Locke, 2001; Barringer and Jones, 2004) and characteristics of the firm have been cited. It has been suggested that owner-managers' growth aspirations or willingness to grow, their growth motivation and communicated vision influence business growth (e.g., Kolvereid and Bullvag, 1996; Baum, Locke and Smith, 2001; Delmer and Wiklund, 2003). The characteristics of the business relate to key decisions made on starting the business which are deemed to impact on growth of the business.

Moreover, existing literature shows that firm age and size, legal status, sector affiliation and firm location all relate to growth (Storey, 1994). Significantly, the discussion of age and size as drivers of business growth has long been examined in the literature following the

formulation of ‘Gibrat’s Law’ (Gibrat, 1931). According to the Gibrat’s law, the rate of growth of a firm is independent of its size at the beginning of the period and that the probability of a given growth rate during specific time interval is the same for any business within the same industry. However, the growth influences of age on business growth are mixed (Davidsson, Achetenhagen and Wiklund, 2010).

3.7 CHAPTER SUMMARY

This chapter has examined the phenomenon of business growth including definition of business growth, methods of measuring growth and determinants of business growth. The literature review suggests that models of business growth have been portrayed in a fragmented and inconsistent manner (Weinzimmer et al., 1998). The methods in which business growth is measured have also been found to be mixed (Table 3.1). However, the two most common methods of measuring business growth are sales and employment.

CHAPTER 4

ENTREPRENEURIAL PASSION

4.1 INTRODUCTION

As has been discussed Chapter 3, a wide array of internal factors such entrepreneurs' characteristcis influence business growth (Kolvereid and Bullvag, 1996; Baum, Locke and Smith, 2001; Delmer and Wiklund, 2003). This study therefore examines the role of an important individual variable (entrepreneurial passion) in the growth process of small businesses. The analysis of this issue intends to enhance scholarly understanding beyond the contexts of developed countries. To achieve this objective, this chapter is organised in six sections. The first section introduces the concept of passion. The second section of this chapter defines emotion, affect and passion and explores the extent to which passion is distinct from, yet related to other affective and cognitive variables. Third, dualistic model of passion is assessed. The fourth section of this chapter focuses on entrepreneurial passion and the essential components of entrepreneurial passion. The sixth section focuses on streams entrepreneurial passion reasercch. Finally, the summary of the chapter is presented.

4.2 THE CONCEPT OF PASSION

Psychology of passion has received substantial attention (e.g., Sternberg, 1986; Frijda et al., 1991; Baum, Locke and Smith, 2001; Baum and Locke, 2004). An emerging body of scholarly work suggests that passion plays a significant role in human behaviour (Cardon et al., 2009a), drives powerful influences on the ways coaches interact with athletes (Lafreniere, et al., 2011) and the feeling of burnout by nurses (Vallerand et al., 2010). Passionate people's view of life is driven by positive affectivity and they tend to be active by giving their best. For example, many great discoveries, inventions and achievements have been found to be incited by passion (Balon, Lecoq and Reme, 2013).

Passion in the twentieth century was fundamentally recognised as a temperament, a trait, or something resulting from an individual's internal disposition (Ribot, 1907). The seminal work of Heymans and Wiersma (1912) described a typology including passionate behaviour. Passionate behaviour has been described as the most intense character where ''history can find its most activity heroes'' (Le Senne, 1963: 259). This point is confirmed by extant empirical work which demonstrates that passion plays a crucial role in various activities such as gambling (Ratelle et al., 2004), online gaming (Lafreniere et al., 2009), athletics (Vallerand et al., 2008b), and entrepreneurship (Cardon et al., 2009a). This suggests that passion drives behaviour.

Interestingly, passion has started to attract the attention of entrepreneurial scholars (e.g., Cardon et al., 2005a; Baron, 2008; Vallerand et al., 2008a; Baron, 2008; Cardon et al., 2009a; Cardon and Kirk, 2015). With regards to entrepreneurship, scholarly research has emerged to examine the role of affect, emotion and passion in entrepreneurial action (e.g., Chen, Yao and Kotha, 2009; Cardon et al., 2013). A major conclusion is that passion is crucial for entrepreneurial action and success.

4.3 DEFINING EMOTION, AFFECT AND PASSION

Emotion, affect and passion are related constructs. There has been a long standing debate as to what the term 'emotion' refers to in the literature (Brundin, Patzelt and Shepherd, 2008). However, there appears to be consensus that emotion can occur in affective, facial, psychological and behavioural change (Deckers, 2005). Emotions occur based on specific situations, such as the failure of a venture (Shepherd, 2003; Cardon et al., 2005a). Other scholars argued that emotions are intensive, short-lived with a definite cause and cognitive content (Forgas and George, 2001).

Affect on the other hand, relates to subjective tone of an emotion which can be positive or negative (Deckers, 2005). Affect is noted to have a profound impact on cognitive processes, motivation and is suggested to have a curvilinear association with outcomes (Deckers, 2005). Affect is a term that comprises a broad range of feelings that individuals experience (Watson and Clark, 1984). Accordingly, several scholars have examined affective processes of individuals in entrepreneurial process (e.g., Shepherd, 2003; Baron, 2007; 2008; Foo, Uy and Baron, 2009; Baron and Tang, 2011) and have concluded that affective processes are critical aspect of entrepreneurship. For example, the affective aspect of entrepreneurial passion has been found to be positively related to greater entrepreneurial persistence (Cardon and Kirk, 2015) and creativity (e.g., Baron and Tang, 2011). When individuals experience positive affect, it suggests that a particular situation is moving smoothly, and there is no need to change any current course of action and direction (Seo, Barrett and Bartunek, 2004).

Passion has been defined as a strong inclination toward an activity that people like and invest time and energy into (Vallerand et al., 2003). This definition has three psychological dimensions namely; affective, cognitive and behavioural. A strong inclination toward an activity signifies the affective aspect whilst activities individuals find important demonstrates cognitive. The activities that individuals invest time and energy indicate behavioural aspect of the passion concept.

Several scholars have defined passion to mean ‘‘love’’ for work (e.g., Shane, Locke and Collins; 2003; Baum, Locke and Smith, 2001; Baum and Locke, 2004). This suggests that scholarly enquiry focuses on how affective processes drive entrepreneurial success. There is a general consensus that affective processes influence cognitive processes, motivation and individual well-being in entrepreneurship (Baron, 2008; Foo, Uy and Baron, 2009).

Similarly, Perttula (2003: 15) suggested that passion for an individual's work is ''psychological state characterised by intense positive emotional arousal, internal drive and full engagement with personally meaningful work activities''. Thus, passion drives individuals' attention and actions and passion represents a domain-specific motivational construct (Chen, Yao and Katha, 2009). Passion has been described as a domain-specific construct because the individual requires a target of love for passion with reference to a specific activity or group of activities that encompass certain implicit or explicit value (Schwartz and Bardi, 2001; Cardon and Kirk, 2015).

Indeed, previous scholarly studies have treated passion and emotions interchangeably (e.g., Nair, 2003). A review of passion literature reveals that passion has been conceptualised to include affect and emotion (Table 4.1). While entrepreneurial processes are replete with numerous emotions and feelings (Baron, 2008), one of the essential affective features within is passion (Smilor, 1997). Recently, passion has been associated with the experience of entrepreneurship (Morris et al., 2010). Some researchers have also concluded that passion is an enduring emotional state, such as feeling of enthusiasm, joy and zeal (Smilor, 1997). Thus, passionate activities are meaningful to people and are long-lasting in nature (Vallerand, 2012).

4.4 ASSESSING THE DUALISTIC MODEL OF PASSION

The Dualistic Model of passion, conceptualised by Vallerand et al., (2003), has gained substantial attention in psychology and entrepreneurship (Carpentier, Mageau and Vallerand, 2012; Ho and Pollack, 2014). The Dualistic Model of passion defines passion as strong inclination toward an activity that people like and to which people devote time and energy. The theory behind the Dualistic Model of passion is the Self-Determination Theory (SDT). According to Deci and Ryan (2000) people engage in various activities in order to

fulfil the basic psychological needs of autonomy, competence, and relatedness. The characteristic feature of this conception demonstrates that people can experience two different types of passion towards their activities: obsessive and harmonious passion. Both harmonious and obsessive passion relate to the general definition conceptualised by Vallerand et al., (2003) but can be differentiated from one another in their approach of development and the kind of results they produce.

Individuals with harmonious passion are more inclined to internalise their activities in an environment where they feel more autonomous (Mageau et al., 2009). Earlier research demonstrates that values and regulations relating to dreary activities can be internalised in a controlled or an autonomous way (Deci et al., 1994; Vallerand et al., 1997; Vallerand, 2007). Similarly, activities that individuals like are internalised in the individual's identity to the extent that they value and cherish the activities. Harmonious passion emanates from an autonomous internalisation of the activity they freely endorse and the activity is pursued for autonomous reasons. Harmonious passion thus refers to a motivational force that directs individuals to choose an activity to pursue (Vallerand et al., 2003).

With regards to harmonious passion, the activity remains a significant part in an individual's identity. However, the individual is able to control the activity such that the activity engagement remains the individual's wilful control (Vallerand et al., 2003). Accordingly, individuals with harmonious passion participate in their passionate activities whilst at the same engaging in other activities that are favourable to positive experiences (Hodgins and Knee, 2002).

It has been argued that when individuals engage in an activity with a harmonious passion it allows them to fully focus on the tasks before them and they experience positive outcomes during the task engagement and after the task engagement (Vallerand et al., 2003; Vallerand

and Verner-Filion, 2013). This suggests that there is little or no rivalry between the individual's passionate activities and other life activities. Further, individuals with harmonious passion are able to adapt well to situations where he or she is denied his or her passionate activity. Finally, with harmonious passion, the individual is able to control his or her activities and can decide when or when not to perform the activity (Vallerand and Verner-Filion, 2013).

In contrast, obsessive passion results from a controlled internalisation of the activity that one loves and which occurs when individuals internalise their activities in a context where there is much pressure on them to perform the activity (Mageau et al., 2009; Carpentier et al., 2012). Such an internalisation leads the activity representation to be part of the person identity and internalises the values and regulations of the activity (Deci and Ryan, 2000). In controlling context, individuals internalise intra or inter-personal pressures (or both) which triggers an engagement in passionate activity (Mageau et al., 2009). The individual is compelled to perform certain activities because certain contingencies in the environment such as feeling of social acceptance or self-esteem are attached to the activity (Carpentier et al., 2012; Mageau et al., 2009).

Therefore, people with an obsessive passion tend to perform activities that are excessively appreciated than all other aspects of the individual's life (Vallerand et al., 2003). Thus, individuals with obsessive passion tend to experience an urge to participate in an activity they perceive as crucial. The major problem with obsessive passion is that, it can come at a cost because the persistence displayed by the individual can lead to less than optimal functioning within the domain of passionate activity (Vallerand and Verner-Filion, 2013). This can lead to conflict with other aspects of the individual's activities.

Existing studies have produce consistent results with the dualistic model of passion (e.g., Mageau and Vallerand, 2007; Carpentier, Mageau and Vallerand, 2012; Ho and Pollack, 2014). The two types of passion (harmonious and obsessive) therefore relate to the passion construct (Vallerand et al., 2003; Ho and Pollack, 2014).

Although much progress has been made regarding psychology of passion, the main problem associated with the passion research is that, most empirical studies look at relationships under the course of passionate love (e.g., Harfield and Walster, 1978) and do not deal with passion towards activities such as entrepreneurship with exception of few studies (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Conceptually, however, scholarly reviews linking passion to firm-level outcomes such growth have been substantial (e.g., Cardon et al., 2005a; 2005b; Cardon et al., 2009a, 2009b). However, empirical research linking passion to business growth has been notably slow. Therefore, the section that follows next examines streams of passion research.

4.5 STREAMS OF PASSION RESEARCH

The entrepreneurial passion literature suggests three main streams of research. Figure 4.1 dispalys streams of entrepreneurial passion research. First, scholars have conceived of passion as a trait variable (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). A major conclusion from this stream is that passion has no direct relationship with venture growth but mediated by communicated vision, goals and self-efficacy (Buam and Locke, 2004) and that passion is mediated by compentency, motivation and competitive strategy (Baum, Locke and Smith, 2001). Second, scholars have conceived of passion as individuals' displayed manifestations (Chen, Yao and Kotha, 2009). This stream has been cristicised for not reflecting experienced passion (e.g., Cardon et al., 2009a; Cardon et al., 2013). As such,

some scholars have argued that the displayed approach to passion may simply reflect impression management (Cardon et al., 2013).

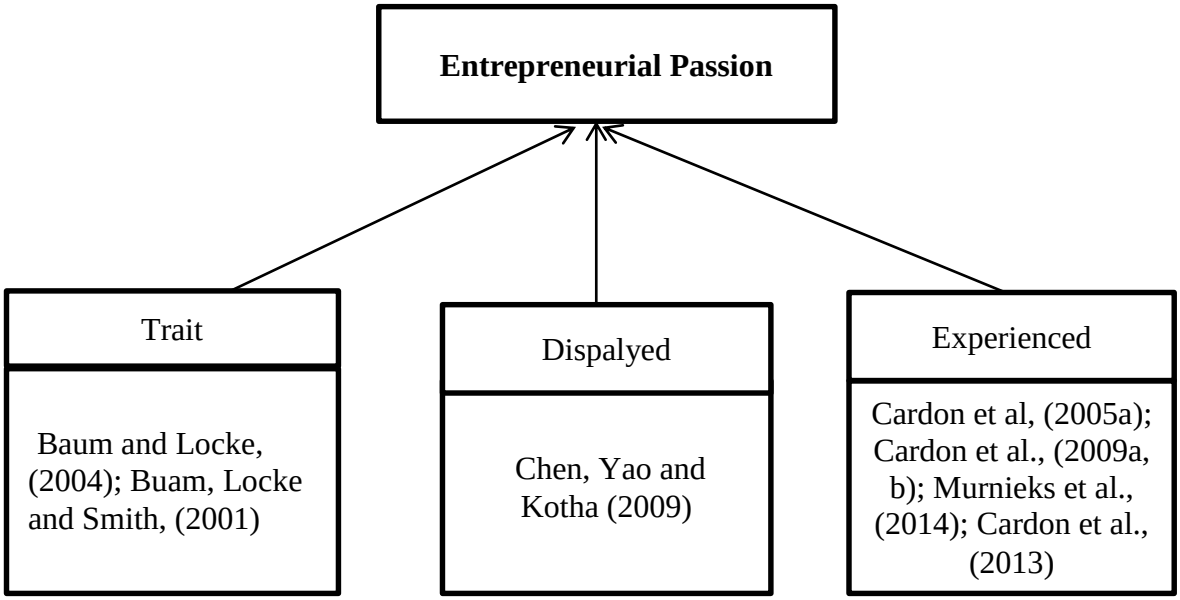

Figure 4. 1: Streams of Passion Research

Source: Author's own construction

Third, passion has been argued to reflect entrepreneurs' experience of passion and focuses on how entrepreneurs report the passion they experience (Vallerand et al., 2003; Cardon et al., 2009a; 2009b; 2013; Murnieks et al., 2014). This stream conceptualises entrepreneurial passion as an affective phenomenon experienced by individuals when engaging in certain activities. Resting firmly on this notion, the present study treats passion as entrepreneurs' experience of passion (e.g., Cardon et al, 2005a; Cardon et al., 2009a, Murnieks et al., 2014; Cardon et al., 2013). Therefore, this study carries on Chen, Yao and Kotha's (2009) essential theoretical development on the affective aspects of passion, but rests with Cardon's et al.'s (2009a) seminal work which shows how entrepreneurs report the passion they experience.

4.6 PASSION IN ENTREPRENEURSHIP

Passion has received much scholarly attention in entrepreneurship (e.g., Bird, 1988; Smilor, 1997; Baron, 2008; Cardon et al., 2009a; Perttula, 2010; Cardon et al., 2013). Indeed, passion studies in entrepreneurship have mainly focused on the contribution of affect, emotion and passion (Baron, 2008; Cardon et al., 2013; Perttula, 2010).

In the entrepreneurship literature, progress has been made in defining entrepreneurial passion (e.g., Cardon et al., 2009a; Cardon et al., 2013; Chen, Yao and Kotha, 2009). For example, Cardon et al., (2009a: 517) defined entrepreneurial passion as ‘‘consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur’’. This definition suggests that the feelings characteristics of passion are positive and intense that focus on certain activities or role identities that are meaningful to the entrepreneur. This is consistent with prior studies (e.g., Vallerand et al., 2003).

Extant empirical studies have revealed that passion through intense feelings and salient identities is linked to entrepreneurial outcomes (e.g., Murnieks and Mosakowski, 2006; Cardon et al., 2009a; Cardon et al., 2013). According to Baum and Locke (2004: 588) entrepreneurs have the desire to ‘‘discover and exploit new products, new processes and new ways of organising. While these endeavours can take many forms, entrepreneurial pursuits are generally examined in terms of recognition and exploitation of opportunities where entrepreneurs found new ventures (Baron, 2008). With regards to this general domain, Chen, Yao and Kotha’s (2009: 199) defined entrepreneurial passion as ‘‘an entrepreneur’s intense affective state accompanied by cognitive and behavioural manifestations of high personal value’’.

Indeed, the empirical study by Chen, Yao and Kotha's (2009) focused on the impact of entrepreneurs' displayed expressions of passion. This approach to defining passion helps to capture behavioural proof of passion, yet the displayed passion observed by these scholars may not precisely reflect experienced passion (Cardon et al., 2013). Therefore to capture experienced passion, the current study deviated from this notion instead followed other scholars (e.g., Cardon et al., 2009a; Cardon et al., 2013) and investigates how entrepreneurs report the passion they experience. As conceptualised herein, entrepreneurial passion is a specific type of intense positive feelings experienced by involving in entrepreneurial activities related to roles significant and salient to the self-identity of the entrepreneur (Cardon et al., 2009a). This conceptualisation includes three essential components of passion: (i) intense positive feelings (ii) identity centrality, and (iii) intense positive feelings and identity centrality are focused on three entrepreneurial passion domains (Cardon et al., 2013).

Table 4. 1: Passion Studies Linked to Entrepreneurship

Author(s)	Construct Used	How Passion is Measured	Type of Research	Key Findings
Baum and Locke (2004)	Passion	Love of work, emotions of love, attachment and longing	Empirical	Passion indirectly affect venture growth
Baum, Locke and Smith (2001)	Passion	Entrepreneurial trait	Empirical	Passion indirectly affect venture growth
Bird (1989)	Passion	Emotional energy, drive and spirit	Empirical	Passion positively relates to entrepreneurs' persistence and tenacity. Passion is related to motivation.
Chen, Yao and Kotha (2009)	Passion	Entrepreneurs' attitude demonstrating enthusiasm	Empirical	Venture capitalists' funding decision is affected by entrepreneurs' cognitive passion.
Cardon, et al., (2005a)	Passion	Identification of entrepreneurs with their ventures. Attachment	Empirical	Passion relates to hard work, persistence and enthusiasm.
Huy and Zott (2007)	Emotion	Entrepreneurial actions	Empirical	Entrepreneurs' displayed passion and enthusiasm relate to investors' confidence in the business.
Smilor (1997)	Passion	Joy, Zeal and enthusiasm	Conceptual	Passion emerges from energetic pursuit of worthy, challenging and uplifting purpose.
Cardon, Gregoire, Stevens and Patel (2013)	Passion	Intense positive feelings and identity centrality	Empirical	Task-specific dimensions of EP (intense positive feelings and centrality of identity are conceptually distinct from one another and from emotions and cognition.
Thorgren and Wincent (2015)	Passion	Strong inclination toward a self-defining activity (harmonious and obsessive passion)	Empirical	Obsessive passion is evident among habitual entrepreneurs than harmonious passion.
Ho and Pollack (2014)	Passion	Positive emotions that an entrepreneur has for the entrepreneurial work and how the work is internalized into one's identity.	Empirical	Harmoniously passionate entrepreneurs had higher out-degree centrality than obsessive passionate entrepreneurs, which increased the income they received from peer referrals and, ultimately, business income. Entrepreneurial passion does not always result in positive financial outcomes – the type of passion makes a difference.

Source: Author's own compilation

Table 4.1: (Continued)

Author (s)	Construct Used	How passion is Measured	Type of Research	Key Findings
Cardon (2008)	Passion	Not clearly defined	Conceptual	Commitment and satisfaction occur due to emotional enjoyment of employees.
Brannback, Cursrup, Elfving and Krueger (2006)	Passion	Emotion and energy	Empirical	Passion may be key to start-up intentions and opportunity exploration
Branzei and Zietsma (2003)	Love and passion	Not clearly defined	Conceptual	Passion and love consist of positive illusions and positive illusions may lead to biases in cognition and greater opportunity exploration.
Baron (2008)	Affect	Events that are situation or stable tendencies	Conceptual	Affect influences entrepreneurial cognition and behaviour.
Winnen (2005)	Passion and emotional intelligence	Passion	Empirical	Passion affects opportunity recognition, mission, vision, decision and planning process of a business.
Cardon, Sudek and Mitteness (2009b)	Passion	Perceived passion	Empirical	Displayed passion differs depending on the stage of the funding process and displayed passion relates to perceived passion and evaluations of funding potential.
Murnieks, Masokowski and Cardon (2014)	Entrepreneurial passion	Passion	Empirical	Passion rises and falls in connection with entrepreneurial identity centrality and passion relates to individual entrepreneurial behaviour and entrepreneurial self-efficacy
Baron and Tang (2011)	Positive affect	General feelings and emotions	Empirical	Foundingd entrepreneurs' positive affect significantly relates to creativity. Creativity positively relates to firm-level innovation. These linkages are moderated by environmental dynamism, being stronger in highly dynamic as opposed to stable environments.

4.6.1 Intense Positive Feelings

Recent theoretical development suggests that intense positive feelings are important to scholarly research in psychology of passion (Damasio, 2003; Schwarz and Clore, 2007) and entrepreneurship (Chen, Yao and Kotha, 2009; Perttula, 2010; Cardon and Kirk, 2015; Cardon et al., 2013). The psychological literature suggests that passion is energy that gives individuals a sense of ‘‘pleasure and promise’’ (Rockwell, 2002: 52). While some scholars treat passion as a trait variable (Baum, Locke and Smith, 2001; Baum and Locke, 2004), other researchers have treated passion as an affective phenomenon that is experienced by an individual when engaging in an activity such as entrepreneurship (Vallerand et al., 2003; Cardon and Kirk, 2015; Cardon et al., 2013). As indicated by Wincent et al., (2008) passion involves deeply experienced positive feelings for something central to the entrepreneur. This scholarly view of passion is consistent with a feeling that is highly intense and positive, similar to excitement but different from a state that is negative and intense such as upset and stressed or state that is positive but not intense such as contented.

Prevailing scholarly work has defined passion as intense positive feelings that are *consciously accessible* (e.g., Cardon et al., 2009a). This view suggests that individuals may reflect on the intensity of their feelings as against different tasks and activities. Extant empirical research suggests that when individuals are passionate about an activity, they think about that particular activity (Chen, Yao and Kotha, 2009). For example, if individuals are passionate about entrepreneurship, they think about entrepreneurship. This suggests that experiences felt by individuals can be captured and measured by asking individuals to report the intensity of their positive feelings towards particular activity. For example, in measuring how passionate entrepreneurs are, participants could be asked to report their experiences about how their positive feelings towards entrepreneurship (Cardon et al., 2013).

4.6.2 Identity Centrality

Entrepreneurs' passion comes about because they participate in certain activities that reflect a meaningful and salient self-identity (Cardon et al., 2009a). Recent theoretical developments relate passion to love of work (Shane, Locke and Collins, 2003; Baum and Locke, 2004) and enthusiasm for venture-related activities (Smilor, 1997) and that passion emerges when an entrepreneurial role identity is salient (Murnieks and Mosakowski, 2006). Therefore, passion is made up of both intensity of feelings and a deep identity relationship to the object of those feelings (e.g., Vallerand et al., 2003; Perttula, 2004; Cardon et al., 2009a, Cardon et al., 2013).

In spite of these efforts to highlight the role of identity meaningfulness in passion (Vallerand et al., 2003), identity centrality remains less developed in the entrepreneurship literature (Cardon et al., 2013). The result of this is that the bulk of scholarly work about passion defines passion as love for work (e.g., Baum and Locke, 2004; Baum, Locke and Smith, 2001) and therefore neglects the meaningfulness of self-identity of respondents. However, the social psychology literature provides concrete evidence of the relationship between self-identity and individual motivations (Goffman, 1959; Burke and Reiyzes, 1991; Styker and Burke, 2000). For example, identity theory in social psychology provides the theoretical orientation for explaining self-identity (Goffman, 1959; Burke and Reiyzes, 1981, 1991). The identity theory focuses on the ''active self'' that poses the question: ''who am I'' (Burke and Reitzes, 1991). Thus, the concept of identity refers to ''internalised expectations that individuals have about the characteristics they hold as central, distinctive and enduring and that are at least partially reflected in the roles they enact'' (Cardon et al., 2013: 376).

Based on this theoretical orientation, Cardon et al., (2013) developed a measurement approach that distinguishes between (i) intense positive feelings towards particular activities

(ii) identity centrality of entrepreneurial activities. The authors suggested that to understand the nature and role of entrepreneurial passion it is important to examine both the direct effects of intense positive feelings towards particular activities and the centrality of these activities to the self-identity of respondents and their boundary conditions.

4.7 ENTREPRENEURIAL ROLE IDENITIES

Recent entrepreneurial passion studies have suggested the relevance of passion's intense positive feelings and identity centrality toward tasks and activities (Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015). For example, extending Gartner, Starr and Bhat's (1999) typology of entrepreneurial activities, Cardon et al., (2009a) suggested three role identities: (i) an inventor, (i) a founder (ii) a developer.

These roles have different sets of tasks and activities demonstrating the challenges involved in different stages of the entrepreneurial process (Gundry and Welch, 2001, Cardon et al., 2013). Apparently, some entrepreneurs are likely to be passionate about all these role identities whereas others may take advantage of identity and pursue as significant and more meaningful in their entrepreneurial process. For example, entrepreneurs who identify self-meaning to invent a product are likely to view inventor identity as important.

Consistent with the above notion Cardon et al., (2013: 376) conceived entrepreneurial passion ''as neither centred on the broad idea of entrepreneurship as a whole, nor too narrowly focused on the idiosyncratic details of one's particular venture, in the sense of one's particular products and services, the industry where this business competes or the particular markets and customers it targets''. This suggests that entrepreneurial passion should be studied by recognising the differences between identities of the individual. Thus, while some entrepreneurs may be passionate about all the three roles of identity, others may be passionate about only one (Cardon et al., 2013).

While Cardon et al.'s (2009a) model of entrepreneurial passion offers a promising approach for entrepreneurial studies; only few studies exist that apply the model (e.g., Bresugst et al., 2012; Cardon and Kirk, 2015). Accordingly, several scholars have called for empirical and systematic studies of entrepreneurial passion to offer further insights for practice and research (Cardon et al., 2009a; Cardon et al., 2013).

4.8 CHAPTER SUMMARY

The chapter examined entrepreneurial passion. The literature has revealed that the effect of entrepreneurial passion on business growth is indirect. Specifically, the literature indicates that personality and trait approach has not been encouraging in improving business success. Moreover, the literature has revealed that entrepreneurial passion research has been conducted in three main streams (trait, displayed and experienced) and scholarly studies that have examined passion and business growth have done so from the trait perspective. This suggests that there have been no studies that focus on passion and business growth from the *displayed* and *experienced* perspectives. The present study focuses on the experienced perspective of passion (Cardon et al., 2013; Murnieks et al., 2014) to model the relationship between passion and business success. This study focused on the experience perspective of passion because the aim of this study was to capture how entrepreneurs report the passion they experience, not how others observe any potential displays of such passion.

Additionally, existing literature on entrepreneurial passion-business growth relationship reveals no empirical results regarding the moderating effects of different network ties outside the borders of the business and environment factors. Finally, a literature review (See Table 4.1) has revealed that the relationship between entrepreneurial passion and business growth has been studied from the aggregate perspective producing mediating relationships within the trait approach. Thus, studies examining the relationship between entrepreneurial passion and

business growth from the disaggregate perspective are missing. Therefore, as well as investigating passion from an aggregate perspective, the current study examines passion from the disaggregate perspective.

CHAPTER 5

CONCEPTUAL FRAMEWORK AND HYPOTHESES

5.1 INTRODUCTION

In the previous chapter (Chapter 4), this study revealed three streams of entrepreneurial passion research. In this chapter (Chapter 5), the *experienced* approach to studying entrepreneurial passion is chosen to model the effect of passion on business growth. This chapter therefore, looks at the development of a conceptual model to define the key role of entrepreneurial passion and its domains in driving business growth. To achieve this objective, this chapter is organised in five sections. The first section introduces the major theoretical underpinnings of the current study. The second section focuses on the theoretical connection between entrepreneurial passion and business growth. Thirdly, hypotheses relating to the moderating effects of political ties and environmental dynamism on the hypothesised association of entrepreneurial passion with business growth are presented. The fourth section focuses on the conceptual relationship of the entrepreneurial passion domains with business growth. In the fifth section, the moderating effects of political ties and environmental dynamism on the proposed associations between individual passion domains (inventing, founding and developing) and business growth are also presented. Finally, the summary of the chapter is presented.

5.2 THEORETICAL UNDERPININGS

Having examined the focused of the current study, it is important to examine the theories that underpin the current study. The current study draws on four main theories to achieve its objectives. These include the identity theory (Stryker, 1968; Stryker and Burke, 2000), regulatory focus theory (Higgins, 1997), contingency theory (Burns and Stalker, 1961;

Donaldson, 2001) and social capital theory (Granovetter, 1985; Bourdieu, 1986). These theories are explained in the sections that follow next.

5.2.1 Identity Theory

The social psychology literature suggests that the concept of passion reflects high-priority goals that shows emotionally significant outcomes (Frijda et al., 1991) and tends to demonstrate the individual's creativity (Goldberg, 1986). Prevailing scholarly studies argued that entrepreneurs' passion is connected to identities (Murnieks and Mosakowski, 2006; Cardon et al., 2009a; Cardon et al., 2013; Murnieks et al., 2014). Identity internalises expectations about the aspects individuals hold about themselves which are central, distinctive and enduring, and which are at least in part reflected in the social role that they enact (Brockner, Higgins and Low, 2004; Burke and Reitzes, 1991; Cardon et al., 2009a). For this reason, identity theory provides a theoretical orientation for examining the relationship between entrepreneurial passion and business growth.

Identity theory, conceptualised in previous studies (e.g., Stryker, 1968; Stryker and Burke 2000) suggests that identities commence as social roles. These roles demonstrate the behaviours and meanings connected to certain social group such as ''entrepreneurs''. Accordingly, Cardon et al., (2009a) broadened the identity theory in the entrepreneurship literature by suggesting multi-faceted entrepreneurial self-concepts.

More specifically, extant literature has argued that there are many different types of entrepreneurial identities rather than a single entrepreneurial identity (Cardon et al., 2009a; Cardon et al., 2013). Accordingly, a number of scholars have conceived passion from empirical perspective considering three specific aspects the entrepreneurial passion: 1) passion involves the experience of intense positive feelings, 2) passion results from engagement in activities with identity meaning and salience to the entrepreneur 3) the

feelings and identity centrality are focused three specific entrepreneurial domains (e.g., Cardon et al., 2013).

Cardon et al., (2013) offered three distinct entrepreneurial identities-an *inventor,* a *founder* and a *developer*. These three entrepreneurial identities are role identities and represent important drivers of entrepreneurial activities. While some entrepreneurs may be inclined towards all these role identities, others may take one identity as more important to them than others. All the three distinct role identities are prevalent and significant drivers of entrepreneurial behaviour (Cardon et al., 2009a; Cardon et al., 2013). Further, the theory suggests that while one role identity is more salient than another, entrepreneurs tend to have multiple identities (Burke, 2006; Cardon et al., 2009a; Laaksonen, Ainamo and Karjalainen, 2011; Cardon et al., 2013).

This study draws on identity theory to model the relationship between entrepreneurial passion and its domains with business growth for the following reason. First, the position of identity theory is that individuals deeply experience positive feelings for something important to them and that the positive feelings are related to the roles that are central to the self-identity of the individual (Cardon et al., 2009a; Stryker, 1968; Stryker and Burke, 2000). This position is consistent with the position taken by the current study that entrepreneurial passion has a strong inclination toward certain activities such as founder, inventor and developer identities (e.g., Cardon et al., 2009a; Cardon et al., 2013).

5.2.2 Regulatory Focus Theory

The second major theoretical perspective that guides the integration of entrepreneurial passion and business growth is regulatory focus theory (Higgins, 1997). The regulatory focus theory suggests that individuals may not attach similar importance to potential positive outcomes as to the potential negative outcomes (Brockner et al., 2004; De Carolis and

Saparito, 2006). A major assumption of regulatory focus theory is that individuals may approach pleasure and avoid pain in very different ways (Brockner et al., 2004). The regulatory focus theory, therefore, offers two major self-regulatory roadmaps; that is 'promotion focus' and 'prevention focus'.

The theory suggests that individuals using 'promotion focus' emphasize potential gains, while those individuals using 'prevention focus' avoid potential losses (Brockner et al., 2004). This study argues that the ideas of 'promotion focus' and 'prevention focus' are consistent with entrepreneurial view that identifying, transforming, and acknowledging opportunities rest on the individual and the environment (Shane and Venkataraman, 2000). Therefore, for the individual to realise higher growth outcomes, exploring growth opportunities must be balanced with realistic perception of the existing threats or risks. This study contends that it may not be enough for entrepreneurs to simply react to growth activities in the firm but the most appropriate mix may be the situation where the "promotion focus" path is restrained to some degree by the "prevention focus". Therefore, the regulatory focus theory (Higgins, 1997) makes it relevant for understanding how and why entrepreneurial passion might coordinate entrepreneurs' effort in growing their firms.

With specific regard to business growth, a 'promotion focus' may be more relevant in the inventing phase of the business where entrepreneurs search for innovative and growth ideas deeper and more frequently (Katila and Ahuja, 2002), and when business growth is essential. The inventing stage is crucial as entrepreneurs engage in exploration and exploitation of activities necessary for pursuing higher growth goals. Importntly, a 'promotion focus' may be important at the founding stage, where entrepreneurs assemble the necessary financial, human, and social resources needed to create a new venture (Cardon et al., 2013). This is because a 'promotion focus' shows the potential gains that the individual is likely to get from

assembling, the financial, human, and social resources for founding the business. Research in entrepreneurship research indicates that at the founding stages of the entrepreneurial process, individuals with high promotion focus surpass because such individuals are able to better consider new possibilities and generate growth and innovative ideas than their colleagues with high prevention focus (Brockner, et al., 2004).

On the other hand, a 'prevention focus' may be more useful during the business developing stage, where a reality check as well as the identification of business risks is of key importance (Brockner et al., 2004). This stage is characterised by different strategic effort for organisational management (Gundry and Welch, 2001), management styles (Smith and Miner, 1983), communication excellence (Baum and Locke, 2004).Therefore, this theory helps in understanding the different types of entrepreneurs such as an inventor, a founder and a developer.

5.2.3 Contingency Theory

Several scholars have examined the contingency theory (e.g., Venkatraman and Prescott, 1990; Ginsberg and Venkatraman, 1985). A point of convergence is that there are several ways of organising and for that matter any one way of organising is not sufficient under all situations. It has been argued that there is no comprehensive strategy that is excellent for all businesses regardless of their resource advantages and environmental conditions (Galbraith, 1973).

Several contingency scholars contend that firm performance is a function of the agreement between a firm and its external environment, strategy and structure (e.g., Duncan, 1972; Miles and Snow, 1978; Venkatraman, 1989; Fredericks, 2004). Consistent with other contingency scholars, Fiedler (1964) suggests that the optimum organisation is subject to various internal and external constraints. Strategic management scholars argued that the

assumption is rooted in the concept of matching organisational resources with the corresponding environmental context (Chandler, 1962; Schendel and Hofer, 1979a; Andrews, 1980; Ginsberg and Venkatraman, 1985). This suggests that there is no one-size fits all set of strategic choices that is optimal for all businesses, irrespective of their resource positions and environmental context (Ginsberg and Venkatraman, 1985; Lawrence and Lorsch, 1967).

Many scholars are of the view that the contingency theory is appropriable in modelling two or more organisational and environmental variables (e.g., Covin and Slevin, 1991; Lumpkin and Dess, 1996). Similarly, entrepreneurship scholars have applied the contingency theory to examine the relationships of several studies (e.g., Balabanis and Katsikea, 2003; Wiklund and Shepherd, 2005). This suggests that any positive association between entrepreneurial passion and business growth might positively or negatively change in different external environmental and internal organisational contexts. Following this notion, this study contends that the influence of entrepreneurial passion on business growth may be contingent on certain external environmental forces and organisational characteristics. As such, drawing from the fundamental premise of the contingency theory, this study argues that when environmental dynamism is high, the benefit the individual obtains from experiencing passion is greater.

5.2.4 Social Capital Theory

Political network and ties are not uncommon in sub-Saharan Africa due to the collectivistic nature of cultues found in this region (Acquaah, 2007). Scholarly studies in organisational theory and industrial sociology tend to direct our attention to the role of managerial networking and interpersonal relationships in facilitating the exchange of valuable information, resources and knowledge among entrepreneurs (e.g., Laumann et al., 1978; Gulati, 1998; Adler and Kwon, 2002). Resting firmly on this notion, this study draws on social capital theory (Granovetter, 1985; Bourdieu, 1986) to offer a better understanding of

the beneficial effects of passion (and its domains), arguing that political network ties are important informal governance mechanisms that lessens the effect of institutional voids (North, 1990; Acquaah, 2007) and thereby bolster the effect of passion on business growth.

Research has shown that network ties are crucial form of managerial tool when legal and regulatory institutions are weak in enforcing economic exchanges (Granovetter, 2005; Sheng et al., 2011; Boso, Story and Cadogan, 2013). This study contends that because formal entrepreneurial-supporting institutions in emerging country setings are less effective (London and Hart, 2004; Acquaah, 2007; Acquaah and Eshun, 2010; Boso, Story and Cadogan, 2013), political network ties (defined as entrepreneurs' social ties and connections with regulatory and governmental institutions) may be crucial in bolstering the effectiveness of entrepreneurial passion on business growth. Thus, this study argues that when entrepreneurs develop a superior political networking capability, the benefit entrepreneurs obtain from experiencing passion (and its domains) is higher.

5.3 CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

The current section discusses the development of a conceptual model that relates entrepreneurial passion to business growth. In studying the entrepreneurial passion relationship with business growth, previous research has looked at the relationship from overall passion (i.e. aggregating all measures into a single score) perspective (Baum and Locke, 2004; Baum, Locke and Smith, 2001). However, Cardon et al., (2013) called for research that examines entrepreneurial passion in each domain (inventing, founding and developing) separately. It is important to note that both perspectives (aggregate and disaggregate) have some significant advantages and disadvantages in terms of theory development.

First, examining entrepreneurial passion domains from the aggregate effect perspective allows scholars to see only aggregate effects. This obscures the contributions of the specific individual domains. For example, some scholars have reported results on the influence of entrepreneurial passion on venture growth suggesting that entrepreneurial passion has no direct effect on venture growth (e.g., Baum, Locke and Smith 2001; Baum and Locke, 2004). This is an example of some of the problems from studying entrepreneurial passion from the aggregate perspective. Therefore, it is important to study entrepreneurial passion from the disaggregate perspective where each individual passion domain is examined separately (Cardon et al., 2013).

Second, examining the entrepreneurial passion construct from disaggregate perspective enables researchers to observe individual effects of entrepreneurial passion domains on significant dependent variables. The main advantage of the disaggregate perspective is that, it gives scholars the opportunity to achieve greater rigor and be able to look at a bigger picture about entrepreneurial passion's contribution to business growth. Scholars are able to see important information on the unique results of the individual domains and this can offer a unique opportunity for theory development (Cardon et al., 2013).

However, research suggests that examining a construct using the disaggregate effect method can be difficult and time consuming (Kreiser, Marino and Weaver 2002). A major ramification, therefore, is that findings for aggregate versus disaggregate models can result in divergent conclusions. Therefore, the current study adds to the entrepreneurial passion and entrepreneurship literature by integrating both perspectives. As such the focal point of the sections that follow next is to link (i) an overall entrepreneurial passion to business growth, and (2) the entrepreneurial passion domains to business growth. Figure 5.1presents the conceptual model of the study.

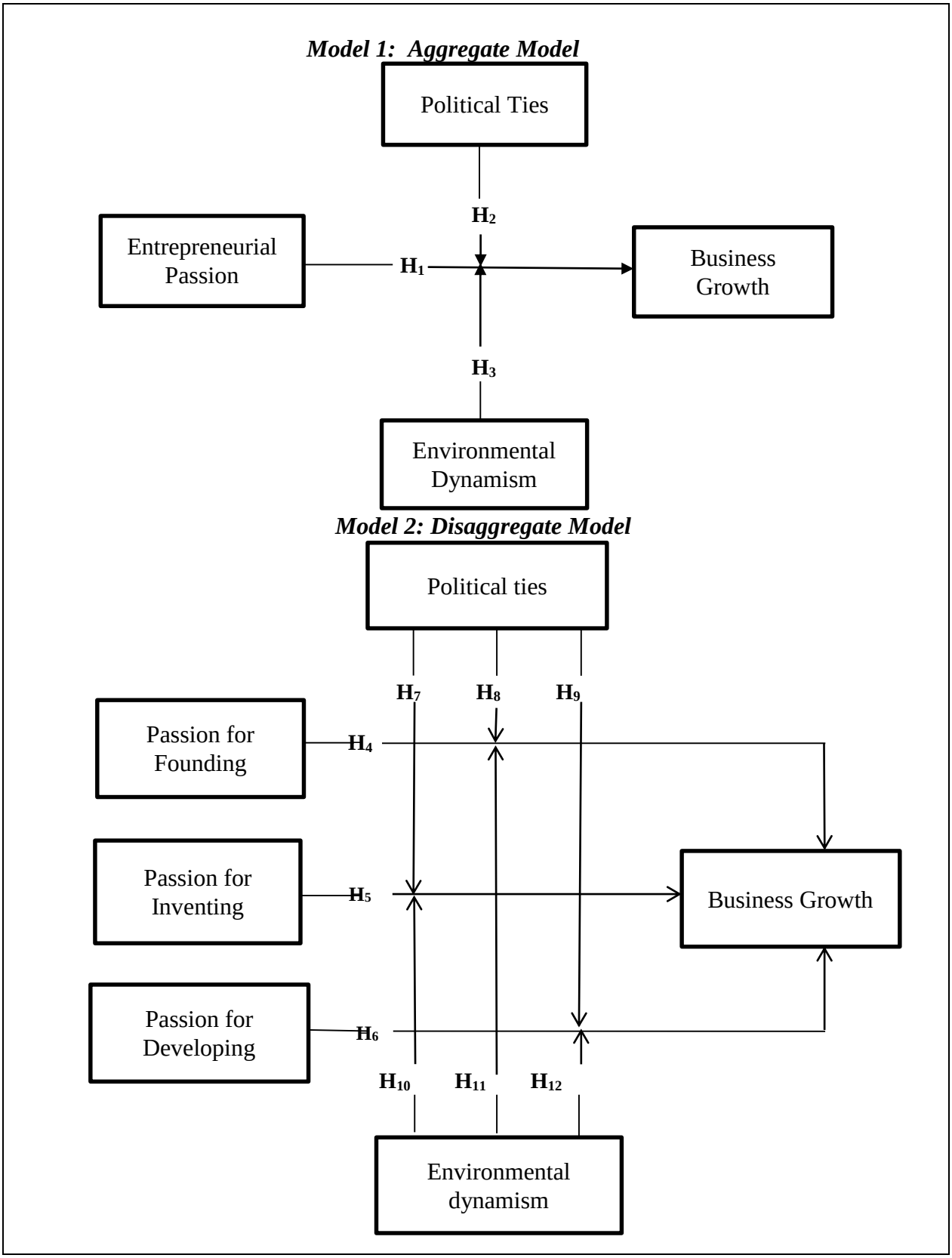

Figure 5. 1: Conceptual Model

5.3.1 Passion and Business Growth

The role of passion, entrepreneurial motivation and venture success has long been recognised (Bird, 1988; Smilor, 1997; Baum, Locke and Smith, 2001; Baum and Locke, 2004). While passion has been recognised as key component of entrepreneurial success, prior research suggests that personality traits produced weak results (Aldrich and Wiedenmayer, 1993).

Several entrepreneurial passion studies provide evidence to support the positive association between entrepreneurial passion and business growth (e.g., Locke, 2000; Cardon et al., 2009b; Baron, 2008; Foo et al., 2009; Foo, 2011; Mitteness et al., 2012; Cardon et al., 2013; Murnieks, Mosakowski and Cardon, 2014). First, passion has been recognised as a key characteristic of wealth creators (Locke, 2000) and core ability in entrepreneurial fund raising (Cardon et al., 2009b; Mitteness et al., 2012). Accordingly, scholars have investigated the impact of passion on the entrepreneurial process (e.g., Shane et al., 2003), venture performance (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), creativity (e.g., Baron and Tang, 2011), and venture capital decisions (e.g., Chen, Yao and Kotha, 2009) (see Table 4.1). Second, scholars have conceptually demonstrated the possibility that passion might bring beneficial effects on firm-level outcomes such business growth (e.g., Shane et al., 2003; Cardon et al., 2009a).

This study argues that when entrepreneurs with high levels of passion ‘‘show strong and positive emotions towards their projects’’ (Cardon et al., 2009a: 203), it can lead to the tendency where entrepreneurs are able to take the first-mover advantage of emerging opportunities. The tendency to identify and exploit new opportunities ahead of market competitors is crucial to entrepreneurship (Shane and Venkatraman, 2000). Thus, on this basis of this argument and given previous research on the relationship between passion and business growth (e.g., Shane et al., 2003; Cardon et al., 2009a; Cardon et al., 2013) this study

argues for a positive relationship between passion and business growth. Accordingly, the following hypothesis is suggested:

H_1*: Entrepreneurial passion is positively related to business growth.*

5.3.2 Moderators of Passion-Business Growth

Some scholars have explored potential mediators of the link between entrepreneurial passion and business growth (e.g., Baum, Locke and Smith, 2001). However, variables that moderate the entrepreneurial passion and business growth relationship appear to be missing. It will, therefore, be informative to examine political ties and environmental dynamism on the entrepreneurial passion and business growth relationship as their findings may indicate some new research gaps. The present study contends that contextual factors can affect the success of the firm's entrepreneurial activities. Entrepreneurial passion may be beneficial for small businesses operating in turbulent and dynamic markets. As such, several scholars have charged researchres to develop a more complex understanding of management research by exploring relevant contingencies (Hmieleski and Baron, 2009). In this study, two relevant contingencies are explored: political ties and environmental dynamism.

Political ties or connections denote a networking relationship with government officials such as politicians and bureaucratic officials in regulatory, supporting, investment and industrial institutions (Peng and Luo, 2000; Acquaah, 2007; Acquaah and Eshun, 2010). The incentives for the formation of political ties with government officials and bureaucratic leaders in less developed market economies arises from the state control of key resources (Li et al., 2008). It is argued that political ties help firms to secure favourable regulatory, supporting and investment conditions (Adjibolooso, 1995; Kuada and Buame, 2000; Agrawal and Knoeber, 2001; Khwaja and Mian, 2005; Acquaah, 2007; Acquaah and Eshun, 2010). It has, therefore, been suggested that because the process of business growth in a developing country requires

the entrepreneur to invest a great deal of time and energy on emotionally-laden aims, the favourable treatment received from politicians can assist entrepreneurs to perceive less constraints in the business environment (Acquaah, 2007). Applying Acquaah's (2007) logic to the current study, it seems political ties will serve as a ''lubricant'' for passion, making it more effective by offering higher levels of incentives to engage in activities that entrepreneurs are passionate about. Moreover, the weak enforcement capacity of the formal institutional structures coupled with underdeveloped market mechanism in less developed market economies create a high level of uncertainty about small businesses (Acquaah, 2007). For this reason, small businesses are often denied access to bank loans, which are largely reserved for larger organisations and public sector businesses or are subject to strict government regulations.

Existing research suggests that entrepreneurs' political network ties facilitate the discovery and exploitation of profitable opportunities (e.g., Ostgaard and Birley, 1996; Lee and Tsang, 2001; Sullivan and Marvel, 2011). This study argues that network relationships with politicians and bureaucratic officials can allow entrepreneurs to access resources, information, and knowledge necessary for the small business to deal with the high level of uncertainty in the business environment (Hoskisson et al., 2000; Acquaah, 2007). Thus, it seems that passion might require favourable business opportunities to be more beneficial for entrepreneurs (Smilor, 1997). Therefore, when political ties are pervasive in the entrepreneurs' activities, it is more likely that entrepreneurs within small businesses will be encouraged to pursue activities that will enhance growth. Overall, this study argues that political ties can translate passion into improved business growth. Formally stated:

H_2*: The positive relationship between entrepreneurial passion and business growth is stronger, the higher the entrepreneur's political ties.*

With regards to environmental dynamism, it is crucial to note that the effect of passion on business growth occurs against a backdrop of environmental variables (Baron and Tang, 2011). The role of external environment on entrepreneurial opportunities has been widely studied (e.g., Kirzner, 1987; Shane and Venkataraman, 2000; Hmieleski and Baron, 2009). A major argument is that environmental dynamism increases uncertainty and is characterised by stress, anxiety and risk (Waldman et al., 2001). The likely outcome of heavy information processing burden is high levels of distress and anxiety (Markman, Baron and Balkin, 2003) which in turn leads to higher activation of entrepreneurial action (Beehr et al., 2000; Stranks, 2005). In fact, Baron and Tang (2011) argued that dynamic environment enhances the relationship between positive affect and firm-level outcome such as creativity. Specifically, a recent meta-analysis suggests that affect, in particular entrepreneurial passion, enhances firm-level outcome primarily in rapidly changing environments (Baas et al., 2008) because entrepreneurs facing changing external conditions are receptive to passionate behaviour (Baron and Tang, 2011; Shane and Venkataraman, 2000).

Entrepreneurs with high levels of passion view the changing environment as a source of opportunity (Cardon et al., 2009a; Baron and Tang, 2011). In this regard, dynamic environments allow passionate entrepreneurs with greater latitude for discretion because entrepreneurs generate a collective feeling that radical change is crucial to deal with external changes. Consistent with extant research (e.g., Baas et al., 2008; Baron and Tang, 2011), this study argues that the relationship between entrepreneurial passion and business growth will be stronger in dynamic, as opposed to stable, industry environments, because the environmentally-generated pressures to use the ideas generated by passionate thought will be stronger in dynamic environments. On the basis of this logic and in keeping with the contingency perspective, this study offers the following hypothesis:

H_3: *The positive relationship between entrepreneurial passion and business growth will be stronger when environmental dynamism is higher.*

5.4 DOMAINS OF PASSION AND BUSINESS GROWTH

Having hypothesised the main relationships that are likely to predict business growth, it is plausible to contend that some of the individual entrepreneurial passions might predict business growth more strongly than others. Some entrepreneurship and strategy scholars have shown interest in this issue (e.g., Morgan and Strong, 2003; Wiklund and Shepherd, 2005; Hughes and Morgan, 2007). The present study contends that while some of the domains of entrepreneurial passion are expected to work more favourably in predicting business growth, others might work against it. Further, the degree to which individual domains of entrepreneurial passion predicts business growth might be contingent on certain factors outside the borders of the business. Based on this logic, the present study develops hypotheses relating to the relationship between the entrepreneurial passion domains and business growth. This intends to enrich scholarly understanding on the contribution and consequences of the entrepreneurial passion domains to assist theory development.

5.4.1 Passion for Founding and Business Growth

Passion for founding concerns how the individual puts together the necessary financial, human and social resources required to create a new business (Cardon et al., 2009a; Cardon et al., 2013). Starting a new business requires financial, human and social resources and this poses a challenge for most nascent entrepreneurs. Previous empirical literature suggests that the individual's aspiration to found a new business serves as a source of motivation for many entrepreneurs (Aldrrich and Zimmer, 1986; Cardon et al., 2013). Indeed, entrepreneurs differ in their willingness and abilities to act on these opportunities and this variation can affect the entrepreneurial process of founding new businesses. Individuals with high levels of passion

for founding tend to establish ventures for commercialising and exploiting opportunities. Individuals who manifest high levels of passion for founding new firms have been described as habitual entrepreneurs (Ucbasaran et al., 2008; Cardon et al., 2013). That is, some of these entrepreneurs after launching their new ventures quickly entrust these ventures to other people to manage while they found new ones (Rostadt, 1988; Ucbasaran et al., 2008).

It has been argued that entrepreneurs involved in the ownership of multiple businesses (i.e., habitual) often accumulate relevant experience, which can help in identifing subsequent business growth opportunities (Ucbasaran, Westhead and Wright, 2009). Similarly, individuals with strong passion to found new ventures are more likely to exploit entrepreneurial opportunities and perform better than those with a weaker passion to engage in entrepreneurial activities (Shane and Venkataraman, 2000). This indicates that passion for founding relates to entrepreneurial activity that occurs because entrepreneurs act to pursue growth opportunities and achieve performance.

Existing research suggests that when firms possess the necessary financial, human, and social resources, they are able to create, implement, and reap the rewards of entrepreneurial behaviours (Covin and Slevin, 1991) which in turn can lead to higher performance (Shane and Venkataraman, 2000). Additionally, scholars have conceptually demonstrated the possibility that entrepreneurial passion for founding might bring beneficial effects on firm-level outcomes such as growth (e.g., Shane et al., 2003; Cardon et al., 2009a; Cardon et al., 2013). On the basis of these previous scholarly studies, there are theoretical grounds for suggesting that entrepreneurial passion for founding will enhance business growth. Thus, the following hypothesis is suggested:

H_4: *Passion for founding is positively related to business growth*.

5.4.2 Passion for Inventing and Business Growth

Passion for inventing refers to the individual's proclivity to scan the environment for new market opportunities, developing new products or services and working with new prototypes (Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015). Existing empirical work suggests that some entrepreneurs search for innovative ideas more frequently than others (Katila and Ahuja, 2002). Most often, the desire to find solutions to marketplace problems and searching for innovative ideas serve as motivator for entrepreneurs with higher passion for inventing (Cardon et al., 2013).

Individuals with high levels of passion for inventing may actively seek out new opportunities, enjoy coming up with new product or service ideas, and develop new ways of solving problems related to the business. Such innovative ideas are likely to enhance the growth of their businesses (Cardon et al., 2009a).

This study's major argument behind a positive association between passion for inventing and business growth is that extant research on business growth has often emphasised the importance of individual's proclivity to scan the environment for new market opportunities in the development of new and commercially valuable products or services (Snow, 2007; Arregle et al., 2015). Indeed, research has shown that in order to generate potentially valuable opportunities for business growth, organisations must focus on employing creative individuals who can invent exceptional products (Shane, 2003; Leiblein, 2007). Based on this logic and consistent with existing scholarly development (e.g., Shane, 2003; Leiblein, 2007; Snow, 2007; Arregle et al., 2015), this study argues that entrepreneurs with high levels of passion for inventing will enhance business growth. Thus, it is proposed that:

H_5: *Passion for inventing is positively related to business growth.*

5.4.3 Passion for Developing and Business Growth

Passion for developing has been defined as the entrepreneur's proclivity to grow and expand the business after founding (Cardon et al., 2009a; Cardon et al., 2013). Entrepreneurs are motivated to grow and expand their ventures after they had found them. This point is consistent with Cliff (2008) contending that many entrepreneurs are not only motivated by founding businesses but are also motivated to grow and expand their ventures. This is important because some scholars are of the view that achieving growth is the essence of founding the business (Sexton, 2001). To achieve growth, small business owner-managers often are more aggressive than their counterparts in devising strategies for growth (Gundry and Welch, 2001). As such, they employ different management styles (Smith and Miner, 1983) and to communicate effectively to different stakeholders in a way that brings growth and expansion (Baum and Locke, 2004).

As business growth is affected by a complex array of factors (Baum, Smith and Locke, 2001) business owners pursue a variety of business strategies to achieve growth and expansion. Accordingly, Hay and Kamshad (1994) contended that even if growth is perceived by entrepreneurs as the most important management objective, unless effective and appropriate strategies are deplored, growth will remain an elusive objective. Similarly, Kim and Mauborgne (1997) stated that the differences between the high-growth business and low growth businesses can be found in each group's strategy. Thus, entrepreneurs who experience high passion for developing are likely to employ strategies that would eventually lead to business growth (Cardon et al., 2009a).

As argued by Cardon et al., (2013), entrepreneurs who experience high passion for developing may enjoy activities such as growth in sales, hiring new employees, or finding external equity to fund their businesses. This is similar to organic growth whereby the

business is expanded by means of increased output and customer base expansion (e.g., Penrose, 1959; Davidsson, Achtenhagen and Naldi, 2010; Lockett et al., 2011). Accordingly, the present study suggests the following hypothesis:

H_6: *Passion for developing is positively related to business growth.*

5.5 POLITICAL TIES, DOMAINS OF PASSIONS AND GROWTH

In terms of the domains of entrepreneurial passion, the current study posits that the influence of each entrepreneurial passion on business growth might depend on the level of political ties. The subsections that follow next, the moderating effect of political ties on the relationship between entrepreneurial passion domains and business growth are examined.

5.5.1 Political Ties and Passion for Inventing

Passion for inventing is said to be present when entrepreneurs pursue active implementation of new ideas, products, processes or technologies for new market opportunities and developing new products (Cardon et al., 2009a). Passion for inventing ushers in new innovative ideas and products development. Entrepreneurs who experience passion inventing exploit and invent key products or services more rapidly than competitors (Cardon et al., 2013).

Higher levels of political networking should help firms manage these market activities better. This is because political ties help firms to secure favourable regulatory conditions (Agrawal and Knoeber, 2001, Acquaah, 2007). Thus, entrepreneurs with higher levels of political ties are likely to receive favourable certification and approval to products as meeting government standards and obtain information about new regulations that may influence the firm's inventing activities (Acquaah, 2007). For example, in most sub-Saharan African countries, government officials and bureaucratic officials control the regulatory and licensing procedures.

Politicians and bureaucratic officials, therefore, can provide entrepreneurs with favourable licensing and regulatory procedures to invent new products that can translate passion for inventing into heightened growth outcome. The reason is that politicians can facilitate passion for inventing activities such as implementation of new ideas, products, processes or technologies for new market. The core argument in support of this claim is that, strong political ties serve as a protection for developing country entrepreneurs' investment against potential environmental threats and foster stronger opportunity exploitation (Chung, 2012; Boso, Story and Cadogan, 2013).

Entrepreneurs with stronger political ties not only benefit from preferential treatment in terms of contracts from the government but also earlier warnings and advance notice of incoming government regulations and monetary incentives (Acquaah, 2007). Certainly, an advantage of advanced warning and financial incentives will enable small businesses to plan in advance for certain environmental shifts (e.g., with new product designs, specicifications and certifcations) necessary for inventing a product or service.

This study argues that political ties can underpin the effective implementation of activities associated with scanning the environment for new market opportunities and developing new products or services (Cardon et al., 2009a). Accordingly, it is argued that political ties can foster entrepreneurs' effort in seeking out new opportunities and coming up with new product or service ideas (passion for inventing) such that passion for inventing is more strongly positively related to business growth under high levels of political ties. Accordingly, this study offers the following hypothesis:

H_7: *The positive association between passion for inventing and business growth is stronger, the higher the entrepreneur's political ties.*

5.5.2 Political Ties and Passion for Founding

Passion for founding entails a propensity to commit the necessary financial, human, and social resources required to create a new venture (Cardon et al., 2009a). Successful new businesses bring greater financial returns than unsuccessful businesses. Entrepreneurs with passion for founding desire to found new businesses that bring financial success and happiness. The desire to found a business serves as a motivation for many entrepreneurs (Aldrich and Zimmer, 1986). Individuals with passion for founding often have a need for achievement that finds itself in developing an event (Katz and Gartner, 1988; Cardon et al., 2009a; Cardon and Kirk, 2015).

Entrepreneurs with high passion for founding often enjoy the founding process and often develop identities that are intertwined with the venture identity (Cardon et al., 2005a; Cardon et al., 2013). However, private businesses in less developed market economies often face many challenges including access to financial resources which are largely reserved for public enterprises or are subject to strict government regulations (Guriev, 2004; Robson and Obeng, 2008). Government officials provide financial resources and regulatory procedures in these economies. As a result of this, there is a high level of organisational dependency on government for valuable resources and favourable regulations in these economies (Acquaah and Eshun, 2010).

According to Adjibolosoo (1995) politicians and bureaucrats provide a firm with access to resources and opportunities that may influence a firm's activities. Therefore, political ties should help entrepreneurs with passion for founding to find it easy to obtain financial resources and regulatory procedures for establishing new ventures which is likely to translate passion into growth. The rationale is that entrepreneurs experiencing passion for founding need favourable opportunities such as favourable regulatory environment to commit the

necessary financial, human, and social resources to enhance growth of their firms. This study argues that the favourable regulatory preference and reduced environmental uncertainties brought about by political ties might further enhance the effectiveness of assembling the necessary financial, human, and social resources needed to create a new venture (Cardon et al., 2009a; Cardon and Kirk, 2015). Accordingly, political ties are expected to highten the benefits of experiencing passion for founding.

Additionally, from the network theory perspective, political ties can induce high levels of activation among entrepreneurs than those without political ties because of the reduced environmental uncertainty brought about by political ties (Acquaah, 2007; Acquaah and Eshun, 2010). Therefore, political ties serve as conduit for acquiring regulatory preference that can help improve the effect of assembling the necessary financial, human, and social resources for entrepreneurial activities on business success in a developing country (Manolova et al., 2008). Thus, this study argues that:

H_8: *The positive association between passion for founding and business growth is stronger, the higher the entrepreneur's political ties.*

5.5.3 Political Ties and Passion for Developing

Many entrepreneurs are motivated by growing and developing their ventures after founding (Cliff, 2008). To grow the business, these individuals design different strategies for organisational management than their rivals in the industry (Gundry and Welch, 2001). A growing body of scholarly studies suggests that individual's attitude towards growth influence growth of small businesses and the growth agenda varies among owner-managers even if they operate in the same industry (Mathews and Scott, 1995; O'Farrell and Hitchins, 2002; Majumdar, 2010).

The entrepreneurial stake is depicted in organisational learning (Politis, 2005) and development (Dutta and Crossan, 2005) in which the entrepreneur becomes the major decision maker (Majumdar, 2010). This suggests that entrepreneurs tend to rely on different strategies and management styles (Smith and Miner, 1983) and to continue expanding the business and it takes individuals who demonstrate high passion for developing to pursue high growth strategies. For example, entrepreneurs who demonstrate high passion for developing are motivated to expand the business through its internal (organic) and external (Mergers & Acquisition) activities. Storey (1994) revealed that strategy is one of the main antecedents that contribute to growth of small businesses. More specifically, research evidence shows that high growth businesses are shown to be characterised by strategic growth plans pursued by entrepreneurs (Gundry and Welch, 2001). It is suggested that individuals who are proactive in developing their ventures can improve their business performance (Wright et al., 1995).

This study argues that ties with government officials can convert passion for developing into enhanced growth outcome in a developing country because entrepreneurs receive favourable resources from politicians. Therefore, the favourable business opportunities received from politicians and regulatory authorities are likely to convert passion for developing into heightened growth because entrepreneurs will be motivated to develop their businesses due to the favourable incentives received from government and regulatory officials. Thus, when entrepreneurs receive institutional favour from regulatory authorities, they will be motivated to pursue activities associated with the growth and expansion of the venture after founding (Cardon et al., 2009a) which in turn can improve the chances of entrepreneurial benefits of passion for founding. Therefore, this study argues that political network ties will bolster the effect of passion for developing on business growth, such that the relationship is more strongly positively related to business growth under high levels of political ties. On the basis of this argument, this study proposes the following hypothesis:

H_9: *The positive association between passion for developing and business growth is stronger, the higher entrepreneurs' political ties*

5.6 DYNAMISM, DOMAINS OF PASSION AND GROWTH

5.6.1 Passion for Inventing and Environmental Dynamism

Passion for inventing's impact on business growth might be moderated by environmental dynamism. The thrust of the argument for the positive moderating effect of environmental dynamism on the relationship between passion for inventing and business growth is that when the business environment is in constant change, greater passion for inventing can lead to more new product trials because entrepreneurs are likely to come out with new products due to the unpredictability of the environment.

Inventing new products can broaden firms' customer base which can result in higher profitability (Atuahene-Gima and Ko, 2001). Additionally, when the environment is in a state of unpredictability, higher passion for inventing can lead to new product trials and more repeat product purchases as a result of a novelty effect (Baker and Sinkula, 2009). Hence, environmental dynamism should foster greater activities associated with scanning the environment for new market opportunities, developing new products or services (Cardon et al., 2009a), such that the linkage between passion for inventing and business growth is stronger and positive under high levels of environmental dynamism.

A major contention is the idea that for inventing activities to be actualised, it requires creative thinking to be implemented which can only take place when entrepreneurs are motivated (Baron and Tang, 2011; Cardon and Kirk, 2015). This study suggests that such motivation will normally be higher in dynamic, as opposed to stable environments because dynamic environments foster higher firm-level outcomes. Overall, the relationship between passion for

inventing and business growth will be stronger in dynamic than stable environments, because the pressures induced by the environment to use the idea to invent new products or services will be stronger in dynamic environments. Accordingly this study proposes that:

H_{10}: *The positive association between passion for inventing and business growth is stronger when environmental dynamism is higher.*

5.6.2 Passion for Founding and Environmental Dynamism

Passion for founding might be most effective when the environment is in state of constant change. The opportunities brought about by the dynamic environment provide the platform for businesses to venture into new market niches and new geographical markets before their competitors. Previous scholarly studies suggest that entrepreneurs who experience passion for founding search for financial, human and social resources to grow their businesses (Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015). These entrepreneurial behaviours might be prompted by constant changes in the environment which put pressure on firms to venture into new markets and geographical markets. For example Bhide (1994) argues that uncertainty encourages new promising businesses. Therefore, entrepreneurs in uncertain environments will be motivated to focus on new markets to achieve growth.

Indeed, it has been argued that passion for founding serves as a motivator for entrepreneurs who aspire for establishing new ventures (Cardon et al., 2013). As dynamic environment ‘‘reduces stability and predictability of relations among firms and their constituents within an industry’’ (Simerley and Li, 2000: 39), entrepreneurs operating within these industries are required to found new business to avert constraints faced by the existing business in the environment (D’Aveni, 1994). For example, if certain environmental activities pose threats to the firm’s growth initiative, entrepreneurs are likely venture into another business activities leading to founding new businesses. Thus, if environmental factors pose threat to the existing

business, driving resource allocation agendas that underlie founding activities may appear effective.

Additionally, individuals who launch several businesses in their life time (Ucbasaran et al., 2008), may possess experience in assembling the necessary financial, human, and social resources required to found new ventures (Cardon et al., 2009a). The experience acquired from founding new ventures allows them to respond to the likely environmental threats and further allows entrepreneurs to generate high levels of activation in dynamic environments (Cardon et al., 2013). Thus, the levels of activation among entrepreneurs are likely to be higher in dynamic, as opposed to stable environments which in turn fosters greater growth activities (Baron and Tang, 2011). On the basis of this reasoning, this study concludes that dynamic environment can facilitate successful conversion of passion for founding into enhanced growth outcome due to higher levels of activation in dynamic environments. This study summarises this argument as:

H_{11}: *The positive association between passion for founding and business growth is stronger when environmental dynamism is higher.*

5.6.3 Passion for Developing and Environmental Dynamism

The effect of passion for developing on business growth might be moderated by environmental dynamism. This is because entrepreneurs operating in highly dynamic environments, typified by high growth rates, will be confident to enact entrepreneurial actions (Fini et al., 2012). Thus, industries characterised by high growth rates prompt the intensity of a business strategy which eventually generate high growth outcome. In this context, dynamic environments might generate high levels of activation for entrepreneurs to venture into activities that produces higher economic returns.

Additionally, as passion for developing is associated with growth and expansion of businesses (Cardon et al., 2009a), this study argues that entrepreneurs who experience passion for developing can pursue strategies aimed at growth and expansion of their business when environmental dynamism is high. A major rationale is that when the environment is stable and predictable there would be fewer underexploited market opportunities and the returns available from developing a firm may not be very attractive, hence passion for developing may be most beneficial to business growth when changes take place in the environment. Thus, dynamic environments are likely to facilitate the individual's passion in order to develop new products and technologies that can generate higher economic outcomes. This can enhance the growth of the business. Following this logic, the present study argues that:

H_{12}: *The positive association between passion for developing and business growth will be stronger when environmental dynamism is higher.*

5.7 CHAPTER SUMMARY

Chapter 5 presented a discussion of the study's conceptual model and hypotheses development. Consequently, a model relating to aggregate passion, business growth, moderators of the passion-growth linkage, relationship of the entrepreneurial passion domains with business growth, and the moderators of the passion domains (inventing, founding and developing)-business growth linkages was presented. The identity, regulatory focus, contingency and social capital theories offered theoretical directions for the conceptual framework. The study argued that entrepreneurs' overall passion might enable small businesses to return high growth outcomes. The study further argued that the passion domains might individually contribute to business growth. On the basis of this reasoning, the model examined the conceptual association between each individual passion domain and business growth. The individual passion domains' linkages with business growth are also argued to be

moderated by political ties and environmental dynamism. In the chapter that follows next, the study's research methodology is presented.

PART III: RESEARCH PROCEDURE AND DESCRIPTIVE STATISTICS

CHAPTER 6

RESEARCH METHODOLOGY

6.1 INTRODUCTION

This chapter describes the procedures and methods employed to collect data for the present study. The overall goal of the research methodology is to achieve consistency between the philosophical view underpinning this study and the objectives of the research (Easterby-Smith., Thorpe and Lowe, 1997). The methodology used to address a particular research problem must always consider the nature of the data collected to address the research questions or test the hypotheses (Bryman, 2008).

Given the study's research objectives and the hypotheses that have been developed for this study (Chapter 5), it is important to present a detailed research plan that explains how the study's objectives would be achieved and hypotheses be tested. Accordingly, this chapter is organised into eight sections. The first section describes the philosophical underpinnings of the study. The second section describes the research design with a detailed justification for the choice of cross-sectional research design for this study. The third part examines questionnaire design activities. In the fourth section, questionnaire pre-test issues are presented. The fifth section considers some ethical issues relating to the current study. The sixth part, presents the main survey activities. The seventh section describes the data collection procedures and finally, the part eight considers the data analysis techniques used in the study.

6.2 RESEARCH PHILOSOPHY

This section elaborates on the philosophical stance of the current research. According to Denzin and Lincoln (2000a: 45) ''a paradigm defines the worldview and the basic set of

beliefs that inform the research, thereby providing guiding principles with regards to ethics, epistemology, ontology and methodology''. Ontology is about the nature of reality and being whilst epistemology concerns the view in which one acquires knowledge. Accordingly, Mack (2010) argued that ontology is the starting point which may lead to one's theoretical framework in the research process. Therefore, paradigm positioning guides the philosophical assumptions that underpin the research (Denzin and Lincoln, 2000b).

Several scholars have argued that paradigm positioning is significant in defining the philosophical assumption underpinning a particular research. For example, Easterby-Smith et al., (2008) argued that it is essential to recognise the role of philosophical position in the research process which can affect the quality of management research. Further, according to Easterby-Smith et al., (1997) the three main reasons why it is essential to explore philosophical underpinnings of a research study are (i) to clarify the research strategy by refining and specifying the research methods to be used in the study. This involves the type of evidence gathered and where it was gathered from, and how the evidence helps in answering the research questions; (ii) to help the researcher evaluate different research methodologies and methods in order to distil a clearer picture of appropriate methods and their limitations at an early stage of the research, (iii) to help bring out the creative potential of the researcher in the selection or adaptation of research methods. Thus, understanding philosophical positions of different paradigms are likely to offer some clarity regarding the identification of the type of research design that fits into a particular research.

6.2.1 Positivism versus Interpretivism

This section explores the philosophical paradigm underpinning the current study and provides a justification for taking a particular philosophical stance. Two main philosophical traditions that have inspired social science research are positivism and interpretivism (Robson, 1993;

Guba and Lincoln, 1994). In addressing philosophical issues, this chapter examines the two main philosophical traditions or research paradigms (positivism and interpretivism) which are commonly referred to as in the social science research as quantitative and qualitative research.

The positivist paradigm holds the view that reality exists independently of our knowledge of it (Grix, 2004). The ontology of the positivist paradigm is that ‘‘objective knowledge’’ is accessible (Miller and Brewer, 2003). The paradigm is, therefore, underpinned by the application of the natural science research in the study of social phenomenon (Denscombe, 2002).

The epistemological assumption of the positivist paradigm is that, the world is made known to us through our sense experience and that humans are able to receive the sensory stimuli and describe the responses (Guba and Lincoln, 1994). According to the positivist paradigm, validation or disproving of theory can be done from data collected through observation and experience (Miller and Brewer, 2003). Hence, the basic mode of data collection under this paradigm includes quantitative experiments and surveys which assume natural laws and mechanisms.

The interpretivist paradigm, on the other hand, views reality as a complex social construction of meanings, values and life experience (Cohen et al., 2000). Thus, it is concerned with understanding of human behaviour from the perspective of the researcher. The central tenet of interpretivism is that reality is constructed in the mind of the individual, rather than it being an externally singular entity (Hansen, 2004). Interpretivists are of the view that the researcher’s values and experiences cannot be separated from the whole research journey. Interpretivist holds that it is only through the interaction between the investigator and the object of investigation that a deeper meaning can be uncovered. Interpretivist paradigm

maintains that ‘‘lived experiences’’ are important to understand from the point of view of those who live it (Schwandt, 2000).

Data for the interpretivist research is obtained and analysed through the meanings and subjective interpretations of the world (Ernest, 1994). The ontological assumption of the interpretivist paradigm is that reality is indirectly constructed based on individual interpretation with subjective meanings. Epistemologically, the interpretivist paradigm assumes that knowledge is acquired through induction to create a theory (Mack, 2010). Table 6.1 displays the elements of positivism and interpretivism paradigms.

Table 6. 1: Elements of Positivism and Interpretivism Paradigms

Assumption	Positivism	Interpretivism
Ontology	Naive realism: “real” and apprehendable reality	Relativism: local and multiple constructed realities
Epistemology	Objectivism: findings are true	Subjectivism: findings are created
Methodology	Primary quantitative methods based on the verification of hypotheses	Hermeneutical/dialectical

Source: Adapted from Denzin and Lincoln (2000a)

6.2.2 The Philosophical Stance and Research Approach of the Study

In choosing the philosophical stance of the current research, the study draws on what has been discussed in previous sections (positivism and interpretivism) to explain the philosophical world view taken within the context of current research. Indeed, Remenyi et al., (1998) argued that the two research classifications that dominate the social science research are empirical and theoretical research approaches. Whilst empirical research allows the researcher to generate ideas through observations and experiments, theoretical research, on the other hand, relies on the phenomenon through previous research evidence and discusses the concept with experts or individuals who can comment on the subject area (Remenyi et al.,

1998). Research evidence suggests that a large amount of academic research in recent times is based on empirical approach (Bryman, 2008). Indeed, Remenyi et al., (1998) argued that evidence as opposed to thought or discourse, is required to be able to make a satisfactory claim on knowledge. The present study followed the empirical research approach to address the research questions. A major concern is that the research should be relevant to the objectives of the research, as set out in Chapter 1. Overall, this study requires positivist philosophy for this purpose.

The rationale for choosing a positivist or quantitative approach is that, the positivist or the quantitative approach works better for research that is designed to test hypotheses (Hussey and Hussey, 1997). As this study is designed to test hypotheses and not to construct theory, it is reasonable to argue that positivist paradigm, anchored in quantitative method, suits the aims of the study. Thus, as the main purpose of the positivist paradigm is to prove or disprove hypotheses, the focus of the paradigm is compatible with the aims of the current research.

Despite the suitability of the positivist or the quantitative approach for testing hypotheses in the social science research, scholarly evidence suggests that the quantitative approach to the study of small businesses implies that some questions cannot be asked (Gartner and Birley, 2002). Other studies have also maintained that the positivist or quantitative approach fails to provide meaning to the phenomenon being studied (Buame, 1996; Gartner and Birley, 2002; Yin, 2003). Further, Davidsson (2004) argued that quantitative research can hamper the researcher to investigate deeper into the phenomenon under study.

Notwithstanding the limitations associated with the positivist or quantitative approach, this approach is able to include a larger number of participants to respond to a set of questions and to illicit a large volume of numerical data which allows for statistical analysis and testing of hypotheses (Bryman, 2008). This approach usually provides large sample and valid

information about the existence of certain characteristics in the population of interest. This provides basis for generalisations (Buame, 1996; Davidsson, 2004). Accordingly, Hussey and Hussey (1997: 51) maintained that the quantitative approach is able to establish that ‘‘the logical reasoning is applied to the research so that precision, objectivity and rigor replace hunches, experience and intuition as the means of investigating problems’’.

As this study was designed to test hypotheses regarding the role of passion on business growth, the only philosophical approach that fits into the objectives of the research (Chapter 1) is positivist philosophy. Indeed, recent empirical research suggests that the positivist approach has been widely applied in entrepreneurship research (e.g., Mullen, Budeva and Doney, 2009). For example, of the 665 papers published by leading entrepreneurship and small business journals (i.e. Entrepreneurship Theory and Practice, Journal of Business Venturing and Journal of Small Business Management) between 2001 and 2008, almost three-quarters of all papers (N=428) adopted quantitative and positivist approach (Mullen, Budeva and Doney, 2009). This suggests that using a positivist or quantitative approach is not much a problem in small business research.

6.3 DATA COLLECTION ISSUES

6.3.1 Research Design

According to Bryman (2004, 2008) research design provides a detailed roadmap for achieving the objectives of a study. Research design ensures that appropriate data is collected for theory testing (Rindfleisch et al., 2008). A number of data collection techniques such as observation, secondary data analysis and surveys could be used to collect data (Mouton, 2001). Similarly, Kerlinger (1973) identified several research designs including experimental, factorial, cross-section and longitudinal designs which can be used by researchers. This study used survey research design anchored in cross-sectional data.

The survey design method reflects the gathering of statistical information about the attributes, attitudes or actions of a population through the administration of standardised questions to some of the population or all of the population (Buckingham and Saunders, 2004). The survey design is used to collect data on more than one case at a single point in time (Bryman, 2004). The survey design is suitable for descriptive, explanatory and exploratory studies and it is appropriate for measuring attitudes in a large population where individual people serve as unit of analysis (Babbie, 2004). Surveys are able to collect information from large samples of the population. Survey design can be categorised into cross-sectional and longitudinal.

A cross-sectional time dimension or horizon entails the collection of data on more than one case and at a single point in time in order to collect a body of quantitative data (Bryman, 2008). Many scholars have argued that a cross-sectional design allows researchers to compare many different variables at the same time (Babbie, 2004; Buckingham and Saunders, 2004; Bryman, 2008). However, cross-sectional design may not provide adequate data regarding cause-and-effect relationships (Hamilton and Nickerson, 2003; Rindfleisch et al., 2008; Larcker and Rusticus, 2010; Antonakis et al., 2010).

A longitudinal time dimension, on the other hand, studies respondents at different periods in time. According to Zigmund (2003) the main purpose of longitudinal studies is to understand continuity of response and to observe changes that occur over time. Accordingly, Rindfleisch et al., (2008) maintained that longitudinal design is effectively with common method variance and causal inferences because longitudinal design employs multiple respondents, obtains multiple data types and gathers data over multiple periods.

However, Bryman (2004) indicated that the problem of attrition and inadequate roadmaps relating to the time to execute further data collection make longitudinal design difficult in

research studies. Further, the cost and time associated with longitudinal designs discourage academic researchers from implementing longitudinal designs.

In view of the pitfalls associated with longitudinal research design and given the purpose of the present study, the cross-sectional survey design was chosen. Although, business growth entails a longitudinal element, this study was designed to assess entrepreneurs' perception of their firms' growth and whether they think the growth of their firms has been substantial compared with their competitors (e.g., Dess and Robinson, 1984; Covin and Slevin, 1989; Powell, 1992; Murphy, Trailer and Hill, 1996; Acquaah, 2007; Anderson and Eshima, 2013). Therefore, cross-sectional time horizon fits this study. The major aim is examine the impact of entrepreneurial passion (and its domain) on owner-managers' perception of small business growth and to examine the moderating role of political ties and environmental dynamism on these relationships. Moreover, the kind of information the study sought to collect and how the study was carried out were taken into consideration when selecting the cross-sectional design.

This study collected subjective performance data from the respondents at a specific point in time from different segments of the population by drawing samples from those segments of population (Dess and Robinson, 1984; Covin and Slevin, 1989; Tang and Peng, 2003; Anderson and Eshima, 2013). Additionally, given the time frame, limited budget for PhD training and cost associated with longitudinal designs, this study chose cross-sectional design. It is also important to stress that there is no comprehensive longitudinal dataset like FAME (Financial Analysis Made Easy) in the UK that provides information on major public and private companies in Ghana.

6.3.2 Survey Administration Technique

Having examined the research design for the present study, it is important to choose a data collection method. Several studies have examined various survey-based methods for

collecting data in the social science research. For example, Churchill (1995) suggested that survey-based research may collect data using face-to-face interviews, telephone interviews, online questionnaires and mail questionnaires. Additionally, Zikmund (2003) suggested two main ways in which business research may be conducted using survey technique: the use of interactive or non-interactive approaches.

The use of the interactive media approach involves the researcher and the respondent interacting with each other during the research process. The non-interactive technique of conducting survey, on the other hand, involves sending the research questionnaire via a mail without the researcher being present. In the non-interactive survey, the researcher and respondent do not have the opportunity to interact with each other. Therefore, the traditional self-completion questionnaire survey is part of the non-interactive survey data collection method. Thus, questionnaire survey can be conducted through interactive method (face-to-face interviews, telephone interviews) and non-interactive (mail delivery, fax, and e-mails).

One of the most frequently used data collection methods is the telephone interview. A telephone interview method was not used because it was not suitable based on the information the study sought from the respondents. For example, respondents needed time to search for information on sales and number of employees in previous years. This could not be done over a telephone.

Email survey method is other alternative data collection methods that could be used (Zigmund, 2003). Using this method, the questionnaires are able to reach a large number of potential respondents who are geographically spread. However, research evidence demonstrates that the email survey method can be less efficient (Weible and Wallace, 1998). For example, the information communication technology (ICT) infrastructure in Ghana is yet

to achieve its fullest potential. These limitations prompted the researcher that the email method was not the best data collection method for the present study.

Further, postal questionnaire survey by mail (postal) delivery is mostly used by researchers. Thus, the mail survey method has been used extensively in small business and entrepreneurship research (Westhead and Storey, 1997; Huang, 2001). However, several pitfalls of the mail survey method have been cited, including low response rates and non-response bias (Churchill, 1995). A low response rate could distort the statistical analysis of the present study.

Despite the shortcomings associated with the mail survey method, the mail survey method has been found to be relatively cheaper compared with other survey data collection methods (Dillman, 2000). The mail survey method is able to reach a large number of potential respondents who are geographically spread across the country. The mail survey has been argued to have no interviewer bias as they allow the respondents to answer the questions at their own leisure (Buame, 1996). Respondents do not perceive the mail survey as intrusive as opposed to interview approach. Therefore, the greater anonymity perceived by the respondents in the mail survey triggers more accurate answers to sensitive questions.

This study used the face-to-face interview method of data collection. The face-to-face interview technique has been criticised by some studies to be expensive and time-consuming (e.g., Hussey and Hussey, 1997). Moreover, some scholars argued that face-to-face interview method is unable to deal with interview bias (e.g., Hussey and Hussey, 1997; Bryman, 2008). However, Barkham et al., (1996) argued that the face-to-face survey interview enables the researcher to get access to in-depth information about the respondents.

Despite these criticisms, the face-to-face interview method of data collection has been used by many researchers and it has been found that the use of face-to-face interview questionnaire survey covers large geographic area (Bryman, 2008). The traditional face-to-face interview survey strategy also allows the researcher to standardise questions and comes with higher response rate. Indeed, scholars have argued that the face-to-face survey interview is a convenient way of conducting survey (Zigmund, 2003). Based on these advantages associated with face-to-face method of data collection and its suitability for obtaining the information sought by the current study, this study collected data using the face-to-face interview method.

6.4 QUESTIONNAIRE DESIGN

Having proposed a roadmap for the data collection, this section details the questionnaire design process and highlights on issues relating to statements and questions used in the questionnaire. The significance of a questionnaire for data collection has been recognised (Baruch, 1999). A good questionnaire makes it possible to get a valid measure of the research questions and also helps the researcher to get accurate information from respondents. Survey questions should be designed to offer the researcher an opportunity to achieve the objective and to provide answers to the research questions (Bryman, 2008; Robson, 2002).

To ensure validity and reliability of the questionnaire, it is crucial to clearly define the key constructs used in the study. For this reason, items from previous validated scales were adapted and subsequently used in this study (e.g., Miller and Friesen, 1982b; Miller, 1987; Murphy, Trailer and Hill, 1996; Acquaah, 2007; Breugst, et al., 2012; Anderson and Eshima, 2013). A copy of the study's questionnaire is provided in Appendix D. As evident from the questionnaire, the study ensured that the layout and structure of the questionnaire was simple and easy to respond to by respondents with the aim of ensuring high response rate. Indeed,

Dillman (1978) suggested that the layout of a questionnaire should be made up of a series of sections and each of these sections should be related to a particular study variable. The questionnaire was designed to cover five major areas of the study. Section I asked questions about the business environment. Section II was designed to get information on entrepreneurial passion of small business entrepreneurs. Section III was designed to solicit information on firms' practices whiles Section IV asked questions about the business growth and performance of small businesses. Finally, Section V asked questions about company characteristics.

One of the essential issues to consider in designing a research questionnaire is the type of questions to ask respondents. Zigmund (2003) suggested that two main types of questions could be asked in designing a questionnaire. These are closed-ended or open-ended. Whilst closed-ended questions ask respondents to choose fixed alternative answer, open-ended, on the other hand, asks respondents to write answers based on their observations and judgment. According to Zigmund (2003) open-ended questions are appropriate for exploratory research where there researcher may test the feasibility of a more extensive study. The major drawback of the open-ended questions is that it is relatively more difficult to code, edit and analyse and this may lead to interviewer bias (Zikmund, 2003).

Closed-ended questions do not require high interviewer skills and it takes less to get responses from respondents (Zikmund, 2003). Additionally, closed-ended questions are derived from previously validated scales and literature and this makes closed-ended questions standardised in nature. The standardised nature of closed-ended questions may expedite coding, tabulating and data interpretation. Closed ended-questions were used in this study because there were available prior literature on entrepreneurial passion and business growth

and other variables used in the present study. Further, closed-ended questions are able to avoid interviewer bias (Zikmund, 2003).

6.4.1 Scales of Measurement

One important issue to consider in designing a questionnaire is the type of measurement scale to use. The basic objective of this study was to examine the role of entrepreneurial passion in business growth process in Ghana. The questionnaire was, therefore, designed to achieve this major objective.

In designing the questionnaire for the present study, four different types of measurement scales were assessed to examine their suitability for usage. These are: nominal scale, ordinal scale, interval scale and ratio scale. Nominal scale is designed to identify and categorise objects or events (Babbie and Mouton, 2003). Ordinal scales are used to rank the responses and the relative position of items on a characteristic can be indicated (Tull and Hawkins, 1993). Interval scales are designed to rank items such that numerically equal distances on the scale represent equal distances. Ratio scale incorporates the features of other three scales.

According to Tull and Hawkins (1993) it is uncommon to see interval and ratio scales in social sciences. Therefore, most scales are nominal and ordinal. The ordinal scale has been argued to contain all of the information that can be captured in the nominal scale and is able to rank data from lowest to highest (Babbie and Mouton, 2003). The present study was inspired by this trend and used ordinal measurement scale to measure passion, political ties, environmental dynamism and business growth. In addition, interval measurement scale has been used to measure the control variables (gender, entrepreneurs' age, firm age, education, working experience and firm size) in the present study.

6.4.2 Scaling Technique

After the type of measurement scale had been agreed on, the next issue to consider was the type of scaling method to be used in the questionnaire. Several scaling techniques have been suggested in social science research. These include Likert scale, forced choice scale, semantic differential scale and numerical scale. According to Tull and Hawkins (1984) the semantic differential scale and Likert scale have been used extensively in social science research. Several studies have pointed out the effectiveness of the 5- point Likert-scale (Holmes 1974; Zikmund, 2003). The 5-point Likert scale is easily understood by respondents and it has been argued to be very popular for measuring attitudes as a result of its simplicity in administering (Zikmund, 2003). Taking these issues and the advantages associated with the 5-point Likert-scale, the current study used the 5-point Likert-scale.

6.4.3 Operationalisation of the Constructs

This section examines how the different constructs of the present study were operationalised. In line with the objectives of the study, the extant empirical literature was studied extensively to examine suitable scales to measure the constructs of the present study. Measurement scales were, therefore, drawn from relevant previous studies and subsequently adapted and used based on extensive literature review and expert advice from academics from University of Warwick. The questionnaire items were drawn and adapted from the following studies: environmental dynamism (Miller and Friesen, 1982a), business growth (Anderson and Eshima, 2013), political ties (Acquaah, 2007), subjective norms (Ajzen, 1991), and entrepreneurial passion (Cardon et al., 2013). The section that follows explains how the constructs were operationalised in the present study.

6.4.3.1 Business Growth

Growth is mostly cited as the crucial performance indicator of small firm success (e.g., Covin and Slevin, 1989; Lawrence and Lorsch, 1967; Murphy, Trailer and Hill, 1996; Brush and Vanderwerf, 1992; Danson, 1999; Tan and Peng, 2003; Anderson and Eshima, 2013). In keeping with this literature, each respondent was asked to compare their firm's growth with their intra-industry rivals on two items: sales growth rate and employee growth. The measures were taken from Anderson and Eshima's (2013) study of SMEs growth. The sales growth indicator tapped the entrepreneur's evaluation of company's sales growth relative to market objective.

Regarding the employment growth scale, the indicator included the entrepreneur's evaluation of the company's employment growth. Each scale was measured on a rating scale with anchors ranging from 1 = very low to 5 = very high. This approach in measuring growth has several advantages. First, scholarly evidence suggests that due to differences in accounting procedures and the unwillingness of survey respondents to provide objective growth figures make it appropriate to use subjective growth measures (Dess and Robinson, 1984). Second, research indicates that in a small business, the owner-manager's perception of the business' success or failure compared to rivals tends to have a strong motivational influence on business growth (Dess and Robinson, 1984). According to Powell (1992: 125) "CEO perception of performance can be regarded as an important independent variable in and of itself".

The choice for using subjective measures was informed by the unwillingness of the respondents to provide objective information about sales, employment and profitability. Previous research has indicated that due to widespread tax evasion in emerging economies, it

is very difficult to obtain objective accounting data in such economies (Hoskisson et al., 2000; Malik and Kotabe, 2009).

6.4.3.2 Entrepreneurial Passion

Following Cardon et al., (2009a: 517), this study defined entrepreneurial passion as ‘‘consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur’’. Entrepreneurial passion was measured using items developed by Cardon et al., (2013). The current study included three separate scales of passion for inventing, passion for founding, and passion for developing firms.

For each passion scale, two subscales were captured, including the intense positive feelings, and the identity centrality (Cardon et al., 2013). For example, the feelings items were captured using four passion for inventing items, four passion for founding items and passion for developing included three items. Following previous scholarly studies (e.g., Cardon and Kirk, 2015), the feelings items for each type of passion (inventing, founding, and developing) was estimated by averaging the items to form a single composite score of the intense positive feelings of the entrepreneur. Further, the identity centrality of each set of activities was estimated with one item for each passion scale (Cardon and Kirk, 2015).

Previous scholarly studies have treated passion as a multiplicative interaction between intense positive feelings toward an activity and the identity centrality of the activity (e.g., Cardon and Kirk, 2015). For this reason, the current study calculated a final score for each type of entrepreneurial passion by multiplying the appropriate identity-centrality score by its corresponding composite intense positive feeling measure. The combined mean of the domains scale constitute the variable score. Each item was measured on a five-point rating scale: 1=strongly disagree; and 5= strongly agree. The entrepreneurial passion scale has been

used in many scholarly studies and has been shown to be robust (e.g., Breugst, et al., 2012; Cardon and Kirk, 2015).

6.4.3.3 Political network ties

Previous scholarly view suggests that political ties assist businesses to obtain key regulatory resources (Sheng, Zhou and Li, 2011). Following this view, the present study defined political ties as social capital derived from the development of networking relationships with government officials such as politicians at different levels of government and with bureaucratic officials in regulatory, supporting, investment, and industrial institutions (Acquaah, 2007). Thus, political ties items were taken from Acquaah (2007), with insights from Peng and Luo (2000). This approach to measuring political ties has been adopted in other studies and has been shown to be robust (Acquaah and Eshun, 2010). Political ties were measured on a 5-point Likert scale with anchors ‘‘not at all’’ and ‘‘very high extent’’.

6.4.3.4 Perceived environmental dynamism

Environmental dynamism refers to the rate of change and the degree instability of factors within an environment (Duncan, 1972; Miller and Friesen, 1982a; Daft and Weick, 1984; Miller, 1987; Sakarya, Eckman and Hyllegard, 2007; Fini et al., 2012). The environmental dynamism construct was measured by drawing on the scale developed by Miller and Friesen (1982a). This was measured using a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. Many authors have confirmed the reliability and validity of this measure and it has been found to be robust (e.g., Fini et al., 2009; Fini et al., 2012). Table 6.2 below displays summary of variables used in the present study.

6.4.3.5 Subjective norms

Subjective norms refer to the perceived social pressure an individual faces when deciding whether to behave in a certain way such as becoming an entrepreneur (Ajzen, 1991). To

measure subjective norms, this study employed the scale proposed by Ajzen (1991). One item was used to measure the subjective norms construct on a Likert scale ranging from 1 = not at all to 5 = to a large extent.

Table 6. 2: Summary of Variables, Number of Items and Research Reference

	Variables	No. of items	Research Reference
1.	Political ties	4	Acquaah (2007)
2.	Environmental dynamism	3	Miller and Friesen (1982a)
3.	Business growth	2	Anderson and Eshima (2013)
4.	Entrepreneurial passion	13	Cardon et al., (2013)
5.	Subjective norms	1	Ajzen (1991)

6.4.3.6 Profiling Variables

The study used a total of nine questions to profile the small manufacturing businesses that were sampled for study. Many of these variables were sourced from previous research (Wang, 2008; Cardon and Kirk, 2013). For example, firm size was measured by total full-time employee number. Since previous research indicates that demographic variables such as the entrepreneur's age, gender, prior experience and prior education have been found to influence entrepreneurial outcomes (e.g., Shane, 2003), the present study used most of these variables as control variables. Table 6.3 below details the profiling variables used for the study.

Table 6. 3: Profiling Variables

	Variable	How it was measured
Entrepreneur	Age	Age of the entrepreneur (in years)
	Gender	1= male, 0=Female
	Education	1=High School; 2=HND; 3=Bachelor's Degree; 4= Postgraduate
	Prior working experience	1=if the entrepreneur has prior experience; 0=otherwise
Firm	Age	Number of years the firm has been in operation
	Location	1=conurbations, 0=rural
	Legal form	1=if the firm operates as limited liability, 0=otherwise
	Size	Number of full time employees
	VAT status	1=if the business has been registered to collect VAT; 0=otherwise

6.5 PRE-TESTING OF THE QUESTIONNNAIRE

Prior to the main survey, pretesting exercise was conducted to examine how the respondents would react to the questions in the questionnaire and also to reveal the potential problems that were likely to occur in the survey process (Hussey and Hussey, 1997). Pre-testing involves checking whether the measurement instrument is compatible using a survey technique before the actual fieldwork commences. The purpose of pre-testing the measurement instrument was to ensure that respondents had no difficulties in providing answers to the questions (Saunders et al, 1997). Pretesting was also done to reveal possible pitfalls in the design and administration of the questionnaire (Emory and Cooper, 1991).

Further, a successful pre-testing gave the researcher an opportunity to assess various dimensions relating to the measurement instrument including the time it takes by respondents to complete the questionnaire; clarity of questions, the quality of evidence and their suitability to use in statistical tests, relevance and irrelevance of questions (Tull and Hawkins, 1993; Babbie and Mouton, 2003). The pre-test of the questionnaire was done in two stages. The sections that follow next examine these stages.

6.5.1 Expert Judgement on the Questionnaire

Many scholars have suggested that it is important to assess and evaluate the face validity of the questionnaire before the main survey (e.g., Netemeyer, Bearden and Sharma, 2003; Hair et al., 2006). Additionally, it has been suggested that face validity must be established prior to any theory testing (Hardesty and Bearden, 2004; Hair et al., 2006). Accordingly, Hair et al., (2006) contended that face validity is crucial when items are adapted from previous scholarly studies. Ping (2004) established that to achieve face validity, content of a scale should be relevant and representative of the theoretical construct. Thus, face validity refers to the

degree to which a scale's items reflect what it is expected to measure (Nunnally and Bernstein, 1994).

The present study employed expert advice from academics to determine the face validity of the questionnaire (Hair et al., 2006). Consequently, all measures of the constructs were subjected to expert review in the field of entrepreneurship and social psychology. Indeed, the principal supervisors (two supervisors) of the present study gave their expert advice on the face validity of the measures until an agreement had been reached. Further, the questionnaire was subjected to a thorough review by experts in questionnaire design and scaling in the University of Warwick.

6.5.2 Personal Interview Pre-tests

In addition to subjecting the questionnaire to expert review, the final questionnaire was pre-tested with a selected number of entrepreneurs in order to refine the items. The questionnaires were sent to entrepreneurs in small manufacturing businesses in the Greater Accra and Ashanti Regions of Ghana. Of the 40 entrepreneurs, 31 filled and returned the questionnaire. This represents 77.5% response rate of the pre-test survey. The feedback from the entrepreneurs suggested that a few ambiguous items be reworded to make the questionnaire easy to understand by the entrepreneurs.

A major issue raised by the entrepreneurs that participated in the pre-test was that of the length of the questionnaire. Although most of the entrepreneurs who participated in the pre-test of the questionnaire expressed interest in taking part of the main survey, they were concerned about the effect of the length on the response rate of the study. This called for response rate improvement activities on the questionnaire.

6.5.3 Response Rate Improvement

Since the results of the pre-test suggest that the length of the questionnaire was too long, several response rate improvement activities carried out on the questionnaire before the main survey begun. Several measures were removed to reduce the length of the questionnaire including the instruction at the beginning of the questionnaire's sections (Dillman, 2000). Other items that were deemed irrelevant to the testing of the hypotheses were removed from the questionnaire. Further, the spacing of the questionnaire at the top and bottom of the questionnaire was closed-up.

To further bolster the response rate, respondents were assured of a free report of the survey and a chance to win a £100 raffle (Jobber, 1986; Jobber and O'Reilly, 1998, Dillman, 2000). The cover letter was also personalised (Dillman, 2000). A pre-notification was made over telephone with the owner-managers of the sampled small manufacturing businesses prior to conducting the interview despatched (Jobber and O'Reilly, 1998, Dillman, 2000). This was done to check the respondents' willingness to participate in the survey. The study stated clearly to the prospective respondents that confidentiality would be maintained during and after the research (Jobber and Saunders, 1993).

6.6 ETHICAL CONSIDERATIONS

The present study took into account the following ethical guidelines during the data collection process:

(i) A full description of the procedure of the study was given to the respondents;

(ii) No respondent was forced or coerced to take part in the study;

(iii) All respondents were assured that the information obtained would be treated in confidence and their identity would be anonymous.

6.7 THE MAIN SURVEY

After the questionnaire had been pre-tested, the main survey commenced on 22nd May, 2014 and ended on 20th July, 2014 using a face-to-face survey data collection method. The collection of the survey data started with a pre-notification phone call. During April 2014, the sampled small manufacturing businesses were contacted over the telephone to examine their willingness to participate in the survey. The pre-notification phone call was necessary given that the databases could have been obsolete. One issue to stress here is that, in most developing countries physical addresses are non-existent. Therefore, the addresses obtained were post office box numbers. Further, the pre-notification phone call was necessary to get directions to the location of the businesses.

Additionally, it is important to indicate that Ghana is challenging place to collect data. The challenge is that data is difficult to collect and it is often necessary to employ data gatherers (research assistants) to ensure that questionnaires are completed. The present study employed 35 data gatherers to help in the face-to-face data collection. Before the research assistants commenced actual field work, a day training programme was organised for them. Issues discussed during the training session included the location of the businesses, those who could respond to the questionnaire, time frame for the survey and ethics and guidelines of the survey. On 22nd May, 2014, the survey started with the help of 35 research assistants. The questionnaire was accompanied by a personalised cover letter explaining the purpose of the study and an assurance of confidentiality of the collected data. The letter also promised the prospective respondents a copy of the study's findings and a chance to win a £100 prize draw.

6.7.1 The Population and Sample

A population is the total collection of elements in which a sample may be chosen from (Cooper and Schindler, 2006). The population for this study was all small manufacturing businesses in Ghana. To void confounding by industry specific conditions, this study focused on a single-industry (manufacturing) (Baum and Locke, 2004). Developing a suitable sample frame in developing countries is a difficult task because of lack of detailed industrial listings (Buame, 1996; Obeng, 2007). This situation has been observed in developed countries as well (Curran and Blackburn, 2001; Jay and Schaper, 2003). For example, Curran and Blackburn (2001) observed that the UK lacks a single public business listing for small businesses. Databases tend to provide little information about small businesses because of large number of small business population (Jay and Schaper, 2003).

Moreover, Buame (1996) observed that record keeping in Ghana tends to be less accurate and this makes the accounting for the number and type of small businesses problematic. Prior scholarly studies in Ghana have noted that there is a problem of improper record keeping on small businesses (Steel and Webster (1992; Buame, 1996; Wolf, 2004; Obeng, 2007). Indeed, the last official industrial census in Ghana was taken in 1987. Therefore, this situation is not surprising.

The present study contacted different sources of industrial listings including Ghana Statistical Service, Ghana Business Directory, Association of Ghana Industries, Ghana Employers' Association, Ghana Manufacturing Handbook, Ghana Export Promotion Council, and Ghana Revenue Authority. These sources provided information relating to the names of the businesses, the location, postal address, business activity and type of ownership. Although, some studies have conceived that different sources of unofficial data is problematic (e.g., Capelleras et al., 2008), previous research in Ghana has concluded that the sources used in

this study represent the most comprehensive and reliable sources of business information in Ghana for research purpose (Acquaah, 2007; Boso, Story and Cadogan, 2013).

However, most of these sources proved to be unreliable. As there was no single updated business listing to be contacted for the present study, the researcher encountered several problems during the field work. First, most of the businesses in the sources contacted were large scale businesses and did not meet the present study's definition of a small business. Second, the majority of the businesses were located in the urban centres of Ghana (Kumasi, Accra and Tema).

Lack of appropriate small business listings compelled the present study to use multiple sources of business listings for the sample frame. The following sources were found to be suitable and reliable: the Ghana Export Promotion Council, Ghana Manufacturing Handbook, the Ghana Employers Association, the Association of Ghana Industries and Ghana Telecom Telephone Directory 2013.

6.7.2 Sampling Procedure

As has been stressed in previous section, there is no single accessible public register for small businesses in Ghana (Buame, 1996; Wolf, 2004). For this reason, the study used multiple source business listings for the sample frame. The multiple business listings produced a database of 1475 businesses. Since most of the business listings could not provide adequate about information about the businesses, it was difficult to get access to majority of the businesses in the database. Also, most of the businesses fell into the service and agricultural business categories which were beyond the remit of the present study.

Prior to embarking on the questionnaire administration exercise, particular sample issues were taken into consideration. An important step in survey research involves the selection of

a representative sample of small businesses. According to Davidsson (2004) representative sampling is essential for ensuring that important parts of empirical population are included in the sample. Several factors such as size of the business, location and time frame of the study could influence the selection of the sample (Steel and Webster, 1992; Barkham et al., 1996; Boso, Story and Cadogan, 2013).

The sample selected were those that met the following study criteria: (i) businesses that employ a minimum of 4 and a maximum of 50 full-time employees (Davidsson, 2004) (ii) businesses that had a minimum of 5 years business operation experience (Morgan et al., 2012; Boso, Story and Cadogan, 2013); (iv) businesses with complete contact information of the owner-manager (Khavul et al., 2010); (iv) business that are manufacturers of physical products (Morgan et al., 2012); (v) businesses located in the eight regional capitals and some selected small towns classified by Ghana Statistical Service as major manufacturing regions in Ghana (Ghana Statistical Service, 2000).

A minimum of 4 employees was used as selection criterion for small businesses because the focus of the study was to reduce the number of micro enterprises within the sample (Davidsson, 2004). A maximum of 50 employees was used because the government of Ghana recognises businesses that employ more than 50 employees as large scale firms (Ernst and Young, 1997) and business that employ less than 50 employees are at the heart of the Ghanaian government (Buame, 1996; Obeng, 2007; Robson et al., 2012). Moreover, this study limited its sample to businesses that employ between 4-50 employees because it specifically focused on small rather than large businesses to capture the likelihood that they have not yet reached the point of financial stability (Morse, Fowler and Lawrence, 2007; Cardon and Kirk, 2015).

This study chose businesses that had a minimum of 5 years business operation experience to capture businesses at various stages of development, such as identification of new opportunities, founding process, growing and developing their businesses (Cardon and Kirk, 2015). Scholars largely disagree as to what constitutes a new venture (Vesper, 1990; Reynolds and Miller, 1992) in entrepreneurship. Although 4-10 years of a business' existence constitutes an important stage for its founding and developing (Shrader, et al., 2000), this study's choice of 5 years and above also captures the developing stage (Cardon et al., 2013). This helps to account for the likely identity shift over time and the impact this may have on growth (e.g., Cardon and Kirk, 2015).

As the study was designed to cover only the manufacturing sector of the economy, businesses that fell within the service and agricultural sectors were not considered in the present study. The reason for choosing the manufacturing sector was that, the main focus of the Ghanaian economy rests on the manufacturing (Kastner, 2005). Two main reasons have been identified as to why the government of Ghana has been paying significant attention to its manufacturing sector. Ghana's unprocessed primary commodities' contribution to the national economy in terms of foreign exchange earnings, employment generation, and firm level learning has not be encouraging, therefore, the need to concentrate on value addition (Kastner, 2005). Further, calls from Ghana's developing partners have suggested that to achieve higher economic growth, the government of Ghana must make its manufacturing sector the prime focus of its socio-economic development agenda (World Bank, 2010).

Further, as the businesses had to be located in the eight regional capitals and some selected small towns classified the by Ghana Statistical Service as major manufacturing hub in Ghana (Ghana Statistical Service, 2000), several restrictions were applied to derive the selection of the study area. The Ghana Statistical Service uses eight regional capitals in their annual

surveys. They are Greater Accra, Ashanti, Western, Northern, Central, Brong Ahafo, Volta and Eastern regions. For this reason, the present study surveyed both small towns and regional capitals located in these regions. These regions have different demographic characteristics which could enhance the comparisons in businesses located in urban and rural areas in these regions. Table 6.4 depicts a summary of the survey of the respondents by region.

Table 6. 4: Survey of Respondents by Region

Region	City (Urban)	Number sampled	City (%)	Small Town (Rural)	Number sampled	Rural (%)	Regional Total (City +Rural)	Total (%)
Greater Accra	Accra	30	16.2	Dodowa	14	8.6	44	12.7
Ashanti	Kumasi	25	13.5	Bekwai	20	12.5	45	13.0
Western	Takoradi	22	11.8	Enchi	16	10.0	38	11.0
Northern	Tamale	21	11.2	Bole	21	13.1	42	12.1
Central	Cape Coast	20	10.6	Elimina	28	17.5	48	13.9
Brong-Ahafo	Sunyani	19	10.2	Techiman	22	13.8	41	11.9
Volta	Ho	24	13.0	Keta	19	11.9	43	12.4
Eastern	Koforidua	25	13.5	Nkawkaw	20	12.6	45	13.0
Total	-	186	100	Total	160	100	346	100

Source: Field data (2014)

The Ghana Statistical Service indicates that businesses located in the eight regions included in sample account for about 83.5% of all manufacturing businesses in Ghana (Ghana Statistical Service, 2006). Figure 6.1 below depicts the map of Ghana.

Figure 6. 1: Map of Ghana

Source: Rankin, Söderbom and Teal (2002)

All the manufacturing businesses in the eight regions sampled for the study were grouped into one database and these produced a database of 1475 businesses. The present study randomly selected 950 manufacturing businesses and contacted the owner-managers by calling them on phone to get information about the business and whether the business was in operation.

The present study adopted random sampling technique for the following reasons: First, to ensure that each unit of the population had an equal chance of inclusion in the sample. Second, the random sampling ensures no opportunity for researcher bias to manifest itself (Bryman, 2008). Third, the selection of small manufacturing businesses was not based on availability.

Out of the 950 manufacturing businesses contacted, 197 were dropped from the sampled population for the following reasons: (i) the sample selection criterion was that only businesses that employed between 4 and 50 workers would be included in the sample. The businesses that were excluded from the sampled population did not meet this selection criterion. (ii) the date of establishment of the businesses did not meet the time frame of five years since establishment. Thus, only manufacturing businesses that were established before 2009 were included in the sample population. Thus, the researcher administered 753 questionnaires to small manufacturing firms in Ghana.

6.7.3 Response Rate Analysis

An important challenge of survey research is to identify techniques to increase response rates. Research evidence suggests that response rates are on the decline (Jobber et al., 1991; Baruch, 1999). Indeed, response rates differ across countries (Bartholomew and Smith, 2006). For example, Jobber et al., (1991) indicated that response rates in North America are higher than in Japan. Response rate in Ghana is relatively low (Ofori and Hinson, 2007). Accordingly, Armstrong and Ashworth (2000) argued that survey methods with response rates of 60% and over are necessary to ensure that the responses give an accurate picture of the population from which they were drawn. However, Bartholomew and Smith (2006) argued that researchers may receive low response rates from small businesses due to lack of organisational slack.

With regards to the present study, a total of 753 questionnaires were administered using face-to-face on site survey administration method in eight regional capitals and eight small towns in these regions. The main aim was to interview the owner-manager of the businesses. The study received a total of 346 completed questionnaires representing 45.9% response rate. Indeed, some of the respondents refused to take part in the survey citing reasons such as

using the survey for tax purposes. It must be emphasised that the 346 completed and returned questionnaires representing 45.9% response rate was due to the face-to-face administration of the questionnaire as response rate in Ghana has been argued to be relatively low (Ofori and Hinson, 2007). The response rates of the present study are provided in Table 6.5.

Table 6. 5: Response Rate Analysis

Data Source	Sample Selected	Actual Sample*	Usable Responses**	Response Rates***
Ghana Export Promotion Council	340	120	74	21.4%
Ghana Employers Association	170	145	52	15.0%
Association of Ghana Industries	220	165	58	16.8%
Ghana Telephone Directory	150	63	56	16.2%
Ghana Revenue Authority	215	135	60	17.3%
Registrar General's Department	380	125	46	13.3%
Total	1475	753	346	45.9%

***Manufacturing firms suitable to complete the questionnaire (i.e. samples after excluding businesses that were not manufacturing, manufacturing businesses that were not in operation, manufacturing businesses that had been in business for less than five years, manufacturing businesses that had less than four employees and more than fifty employees.*

*** List wise deletion of cases due to incomplete information*
**** Response rates calculated based on responses received*

6.7.4 Survey Bias Assessment

In assessing the survey bias of the study, non-response bias assessment and common method bias were examined.

6.7.4.1 Non-response Bias Assessment

As indicated earlier in this chapter, all the 753 questionnaires were sent to the owner-managers of each business between May and July 2014. Usable responses were received from 346 small businesses (response rate 45.9%). To investigate the potential non-response bias, *t*-test comparisons of early respondents versus late-respondents firms on age, size, legal form, total number of full time employees and sales turnover were conducted (Boso, Story and Cadogan, 2013; Anderson and Eshima, 2013). The *t*-test comparisons revealed no significant differences. According to Anderson and Eshima (2013) non-response bias can be tested by

conducting a *t*-test early versus late-responding firms' age, total number of full-time employees, total sales turnover, and total capital. The results presented in Table 6.6 shows no non-response bias between the early-responding and late-responding firms in our survey.

Table 6. 6: Comparison of Early Respondents and Late Respondents

Variables	Early Respondents (N=300)		Late-respondents (N=46)		t-value	Prob.
	Mean	SD	Mean	SD		
Firm age	16.23	7.02	15.59	6.05	-0.08	0.92
Firm Size	16.44	10.21	15.22	10.11	-0.07	0.93
Growth in turnover	13.05	9.23	13.04	9.25	-1.16	0.24
Growth full-time employees	13.69	9.02	13.71	9.01	-0.29	0.81

Results, as shown in Table 6.6, indicate that the differences between the means and standard deviation of early respondents and late respondents were not significant at 5% significant level. The results of this analysis suggest that the mean and standard deviation difference between the early respondents and late respondents was due to chance (Churchill, 1995). Thus, it can be argued that there were no significant differences between responding and non-responding participants in the current study. This suggests that non-response bias was not an issue in this study. The characteristics of the responding firms are presented in Chapter 7.

6.7.4.2 Common Method Bias Assessment

Recent editorial work has stressed the potential problem of common method bias, which reflects the measurement error that is compounded by the sociability of respondents who want to provide positive answers (Chang, van Witteloostuijn and Eden, 2010). The current study collected data on both the independent and dependent variables from the same respondents in the main study, thus raising potential common method variance as false internal consistency might be present in the data (Podsakoff et al. 2003; Rindfleisch et al., 2008; Chang, van Witteloostuijn, and Eden 2010). The present research countered common method bias through several procedures, both ex ante and ex post (Rindfleisch et al., 2008).

Before the main survey, the questions were mixed using reverse-coded items. Further, the respondents were assured of complete confidentiality of information they provided (Chang, van Witteloostuijn and Eden 2010). Moreover, respondents were told to use their own discretion as there was no right and wrong answers to the questions asked (Podsakoff et al., 2003).

With regards to statistical techniques, the present study subjected the scale items to a principal component analysis using oblimin rotation (Harman, 1967). The study used Harman's (1967) one factor test to check whether common method variance is a serious problem in the data. As has been suggested by some scholars, use of an oblimin rotation allows a particular item to load on multiple factors, thus revealing its true influence across all factors (e.g., Samiee and Chabowski, 2012; Cardon and Kirk, 2015). A factor analysis of the items on passion for founding, passion for inventing, passion for developing, political ties, environmental dynamism and business growth scales yielded six factors with eigenvalues greater than one and the first factor accounting for about 15.46% of the variance. Thus common method variance is not likely to be causing the relationship between the dependent and independent variables in this study.

Additionally, three competing models were established (Table 7.16) to examine the threat of common method variance. The results of the models suggest that common method variance was not a concern in this study. Thus common method variance is not likely to be causing the relationship between the dependent and independent variables in this study.

6.8 DATA ANALYSIS PROCEDURE

Hair et al., (2006: 35) argued that ''simple empirical assessments that detail the critical statistical properties of the data'' must be applied before conducting multivariate analysis of the data. Accordingly, the survey data were initially put into and analysed using SPSS 22

version and LISREL 8.7 (Joreskog and Sorbom, 2004). The statistical procedures used in the analysis of the survey data comprised two stages namely, exploratory and multiple regression analysis. Under the exploratory procedure, the survey data were presented in the form of frequency distribution tables. Additionally, exploratory and confirmatory factor analyses were conducted on the constructs used in the present study. This technique allowed for a large number of the exploratory variables to be considered (Roper, 1998). Before employing the ordinary least squares (OLS) technique, the main assumptions of OLS regression analysis was tested, i.e. data normality, homoscedasticity and linearity. Further, prior to proceeding with the multivariate regression analysis, the current study evaluated the key descriptive statistics.

For the purpose of hypotheses testing, OLS technique was employed as a technique for examining the relationships because it has been argued to be the best linear unbiased estimator in social science research (Verbeek, 2002). The main purpose of the OLS technique is to predict values of a continuous response variable using one or more explanatory variables (Hair et al., 2006; Field, 2009). Thus, OLS regression assumes that variables entered into the analysis are continuous. Finally, the current study assessed multicollinearity in all the regression equations through Tolerance and Variance Inflation Factor (VIF). The results of the OLS regression analysis are analysed in Chapter 8 of the current study.

6.9 RELIABILITY AND VALIDITY

To test the reliability and validity of our measures, the present study used LISREL 8.7 and the maximum likelihood estimation method to examine all scales in confirmatory factor analysis (CFA). The current study assessed unidimensionality/consistency through CFA (Sirdeshmukh et al., 2002). Reliability was investigated using both the coefficient alpha (Cronbach's alpha) and Composite Reliability Index (Fornell and Larcker, 1981). Convergent

validity was assessed through the measure of Average Variance Extracted (AVE) (Fornell and Larcker, 1981) and the factor loadings and the t-values (Boso, Story and Cadogan, 2013). Lastly, discriminant validity was examined by calculating the square roots of AVE for all multi-item constructs (Table 8.1) ensuring that for all constructs, each correlation of one construct with another is smaller than the square root of its AVE. The findings indicate that the present study achieved discriminant validity for all measures (Fornell and Larcker, 1981).

6.10 CHAPTER SUMMARY

The main objectives of this chapter were to provide a justification of the philosophical stance of the study; a justification for the choice of cross-sectional research design; discussion of the survey administration method; description of the study's sample frame; and explanation of how survey biases were dealt with in the study. Considering the nature of research, the current study adopted the positivist approach anchored in quantitative methodology. A cross-sectional design was appropriate for this study given that the cross-sectional survey approach is a relatively more efficient approach in terms of cost and time compared to longitudinal design. This survey chose a questionnaire-based face-to-face interview survey method. Given the nature of the Ghanaian business environment and the problems of conducting research in Ghana the telephone, mail and email/online survey administration methods were not appropriate.

Regarding the study's sample, 753 eligible manufacturing small businesses were contacted and 346 useable responses were received representing 45.9% response rate. Respondents were owner-managers with significant knowledge and experience on the businesses' growth and business operations. Finally, several efforts were made to deal with possible non-response and potential problem of common method variance issues. With respect to non-response bias, the study compared the early-responding and late-responding firms and this

exercise revealed no problem for non-response bias. Results of common method variance assessment demonstrated that there is no significant impact of common method variance on the variables examined in current study. Thus, the research design activities in this study suggest that the data analysed in this study were valid. In the chapter that follows next, descriptive profile of the businesses that took part in the survey is examined.

CHAPTER 7

DESCRIPTIVE ANALYSIS AND ITEM ASSESSMENT

7.1 INTRODUCTION

The purpose of this chapter is to present both the descriptive analysis of the sample the results of purification of all items and scales used in this study. To achieve the objective of this chapter, the study follows four main steps. First, this chapter highlights key descriptive statistics of the data to make sure the sample is ready for regression analysis. Second, the chapter presents the procedures for item selection and item analysis using exploratory factor analysis (EFA). Third, the chapter presents the dimensionality and validity assessment procedures using confirmatory factor analysis (CFA). Finally, the chapter gives an account of frequency distribution of the scales to assess the normality of the variables used in the hypothesis testing. In the sections that follow next, account is given of descriptive results and item assessment of the constructs.

7.2 CHARACTERISTICS OF THE SAMPLE

This section provides an account of the general characteristics of the businesses that provided information for the study. The provision of this account is considered important because it provides a basic understanding of the respondents and businesses that were studied. Thus, the descriptive statistics provide an opportunity to understand the characteristics of the sample. This is because the businesses that were studied vary in different dimensions including size, legal status, location, sector of operation and age. Additionally, the analysis in this section shows that the entrepreneurs who responded to the survey questions vary in terms of age, education, gender and working experience. Importantly, the variables that are examined here are taken from the profile variables provided in Section 6.4.3.5 of Chapter 6.

7.2.1 Descriptive Statistics of the Sample

The statistical techniques used in the current study involved exploratory and multiple regression techniques. The exploratory technique was used to present the survey data in the form of frequency distribution tables. This allowed the researcher to compute mean and standard deviation values of the sample. The rationale behind the use of the exploratory technique was to allow for inclusion of a large number of exploratory variables in the analysis (Roper, 1998). Table 7.1 provides descriptive characteristics of the 346 businesses studied.

Table 7. 1: Descriptive Statistics of the Sample

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Size (in employees)	346	4	50	17.44	10.65
Total annual Sales (in 000s of US$)	346	10.46	68,000	978.32	389.71
Founder Age (in years)	346	25	70	49.36	11.62
Firm age (in years)	346	5	50	16.78	7.75
Sales Growth Rate (%)	346	0	100	13.06	9.46
Employee Growth Rate (%)	346	0	100	13.72	9.05

The average number of full-time employees was 17 and annual turnover was UD$978,320. The businesses were growth oriented as indicated by their high average percentage growth rates (i.e. annual sale growth rate of 13.06%; annual employee growth rate of 13.72%). The Table 7.1 also showed a mean age of business was 17 years. The mean age of the entrepreneurs who responded to the survey was 49.3 years. Following Baum and Locke (2004), this study calculated prior growth rate. Prior growth rate (the percentage change in sales and employment between 2011 and 2012 = [(2011/2012)-1] was 5.11%. As has been highlighted in prior scholarly studies, the impact of size, sales, founder age, employee growth rate and prior growth influence business growth (e.g., Baum and Locke, 2004; Robson and Obeng, 2008). Indeed, most of these variables were used to account for exigencies that may influence the research model.

7.2.2 Distribution of the Characteristics

7.2.2.1 Gender

The impact of gender on growth of small businesses has been investigated by several studies. In most studies, male owned businesses have been found to make up a greater proportion of self-employment (e.g., Sowa et al., 1992). This study's sample seems to challenge this view in that male to female ratio in terms of self-employment is comparable in the sample. The reason may be that as result of the 'glass ceiling' phenomenon in formal employment sector, females tend set-up their own businesses in Ghana. Table 7.2 shows that a total of 53.5% of the entrepreneurs were males and 46.5% were females in the survey. This suggests that the male to female ratio of 185:161 could enhance comparability (See section 7.6.55 for a discussion on role of gender).

Table 7. 2: Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	161	46.5	46.5	46.5
Male	185	53.5	53.5	100
Total	346	100	100	

7.2.2.2 Education of Entrepreneurs

A review of the literature on the relationship between educational attainment and business growth suggests a positive relationship between educational background and/ or training qualifications and business growth (e.g., Storey, 1994; Mead and Liedholm, 1998; Barringer et al., 2005; Kozan, Oksoy and Ozsoy, 2006; Robson and Obeng, 2008). Table 7.3 shows the educational qualification of the entrepreneurs.

Table 7. 3: Education of Entrepreneurs

Level of education	Frequency	Percent	Cumulative Percent
High school	123	35.5	35.5
HND	75	21.7	57.2
Bachelors	83	24.0	81.2
Postgraduate	65	18.8	100.0
Total	346	100.0	

The education of the owner-managers was examined according to their highest qualifications. Thus, the educational qualification of the entrepreneurs was grouped into the following: (i) High school; (ii) higher national diploma; (iii) bachelor's and (iv) postgraduate. Table 7.3 indicates that a total of 35.5% were high school graduates; 21.7% were higher national diploma graduates; 25.0% hold bachelor's degrees and 18.8% hold postgraduate degrees.

7.2.2.3 Formality/Informality

In both developed and developing economies, it is widely accepted that a large number of entrepreneurs operate wholly or partially off-the-books (ILO, 2002a; Williams, 2006b; Evans et al., 2006). To assess formability/informality of the sample, the current study used legal status of the sampled businesses. Table 7.4 below shows that legal status of the sampled businesses.

Table 7. 4: Legal Status of the Businesses

Legal Status	Frequency	Percent	Cumulative percent
Unregistered Sole Proprietor	60	17.3	17.3
Registered Sole Proprietor	127	36.7	54.0
Limited Liability	114	32.9	87.0
Partnership	45	13.0	100.0
Total	346	100	

Table 7.4 above indicates that majority of the businesses (82.7%) were formal businesses whilst only 17.3% were informal businesses. That is, 17.3% of the sample businesses were unregistered sole proprietor, 36.7% were registered sole proprietor, 32.9% were limited liability businesses and 13% were partnerships. This is in contrast with previous scholarly studies (e.g. ILO, 2002a; Williams, 2006b; Evans et al., 2006).

7.2.2.4 Sector of Operation

The current study received responses from small manufacturing businesses from eight regions in Ghana. Table 7.5 shows that in terms of the composition of the sectors in the manufacturing industry, 20.8% of the businesses were manufacturers of textiles/garment and footwear; 17.9% were manufacturers of food and beverage; 15.6% were in the wood and furniture sector; 14.5% were producers of stationery whilst 11% were soap/toiletries manufacturers. Table 7.5 depicts sector of operation of the surveyed businesses.

Table 7. 5: Sector of Operation

Sector	Frequency	Percent	Cumulative Percent
Food/beverage	62	17.9	17.9
Textiles/garment/footwear	72	20.8	38.7
Wood/furniture	54	15.6	54.3
Paper Production	50	14.5	68.8
Soap making/toiletries	38	11.0	79.8
Technology/Electronic	36	10.4	90.2
Plastics and pipes	34	9.8	100
Total	346	100	

The rest of the manufacturing businesses sampled for the current study include manufacturers of electronic gadgets (10.4%) and plastics and pipes (9.8%).

7.2.2.5 Entrepreneurs' Working Experience

Prior entrepreneurs' working experience denotes any work related experience acquired before the respondents started their businesses (Locke, 2004). Whiles various studies showed a positive relationship between past working experience and business growth (Storey, 1994; Locke, 2004), other studies have shown no association between past working experience and business growth (Birley and Westhead, 1990). The inconsistencies research evidence on the relationship between past working experience and business growth suggest that past experience does not always lead to business growth. In the present study, past working experience was used as a control variable.

Table 7. 6: Entrepreneurs' Past Working Experience

Response	Frequency	Percent	Cumulative percent
Yes	188	54.3	54.3
No	158	45.7	100.0
Total	346	100.0	

As can be observed from Table 7.6, 188 of the respondents representing 54.3% have gained working experience whilst 158 representing 45.7% had no working experience.

7.3 REFINEMENT OF THE CONSTRUCTS

Before the regression analysis commenced, the current study clearly defined the individual constructs and examined the reliability and validity of the respective measurement scales. According to Hair et al., (2006) it is important to refine all constructs before the data analysis. Following this view, exploratory factor analysis (EFA) was used to select items that loaded on a factor in order to reduce the number of items. Factor analysis is a technique employed to gauge the extent to which measurement overlap (Field, 2009) with the view to reducing measurable and observable variables to fewer latent variables that share a common variance (Bartholomew, Knott and Moustaki, 2011). Similarly, EFA is a procedure used to discover the number of factors influencing variables and to examine the variables that move together (DeCoster, 1998).

Following this notion, EFA with an oblimin Kaiser Normalisation rotation was used to allow for a particular item to load on multiple factors, thus highlighting its true influence across all factors (e.g., Hair et al., 2006; Samiee and Chabowski, 2012). In extracting the factors, the widely accepted principal component analysis criterion (i.e. eigenvalue > 1) was used. Given sample restriction, EFA was performed on each construct. To implement this strategy, EFA on business growth items was performed first. Second, EFA was performed on political ties items. Third, entrepreneurial passion items were analysed. Fourth, environmental dynamism

items were analysed. For completeness and in order to demonstrate support for the robustness of the items used in the study, EFA was performed on all constructs involving all good items (items that had factor loadings exceeding 0.40).

7.3.1 Scale for Business Growth

This scale contained items tapping one component of business growth. Initially, factor analysis was conducted in the bunsiness growth scale to discover the variables that load on the factor. Two items namely; sales growth rate and employee growth loaded on the same factor. The first item relates to employee growth in accordance with literature measuring business growth (e.g., Zahra, 1993; Vaessen and Keeble, 1995; Peters and Brush, 1996; Delmar, 1997; Davidsson and Wiklund, 2000). The second item relates to sales growth. The literature has acknowledged the use of sales growth in measuring business growth (e.g., Miller, 1987; Dunne and Hughes, 1996; Ardishvili et al., 1998; Weinzimmer et al., 1998). Accordingly, the current study assessed these items in a factor. All the two items comprising the factor measuring growth were therefore run in a single exploratory factor analysis. The principal component analysis extraction method and direct oblimin rotation technique were employed. The result of the exploratory factor analysis of business growth scale is reproduced in Table 7.7.

Table 7. 7: Factor Matrix of the Scale for Firm Growth

Items	Factor Loadings
GROW1: Employee growth	.758
GROW2: Sales growth	.714
Eigenvalue: 3.21	
% Variance explained: 60.28	
KMO: 0.76	
Barlett's Test: 567.82 (Sig. 0.000)	
Extraction Method: Principal Component Analysis.	
Rotation Method: Oblimin with Kaiser Normalization.	
a. 1 component extracted.	

As can be seen from Table 7.7, EFA retained all the two items loading in one factor. In all, a total of 60.28% cumulative extracted variance was obtained. As such the growth scale was taken to the next stage of the analysis.

7.3.2 Scale for Political Ties

Exploratory factor analysis was conducted in the scale items for political ties in a single EFA. The EFA results represented in Table 7.8 revealed that all the four items for the political ties scale were loaded on a single factor. This study followed previous research and measured political ties (e.g., Acquaah, 2007; Acquaah and Eshun, 2010). In all, a total of 50.91% cumulative extracted variance was obtained. The factor matrix is reproduced in Table 7.8.

Table 7. 8: Factor Matrix of the Scale for Political Ties

Items	Factor Loadings
POL_TIE2	.798
POL_TIE3	.697
POL_TIE4	.693
POL_TIE1	.658
Eigenvalue: 2.04	
% Variance explained: 50.9	
KMO: 0.717	
Bartlett's Test: 204.36 (Sig. 0.000)	
Extraction Method: Principal Component Analysis.	
a. 1 component extracted.	

7.3.3 Scale for Entrepreneurial Passion

The three domains of entrepreneurial passion were measured by a total of thirteen items. The analysis of EFA revealed that four items tapped intense positive feelings (IPF) inventing and one item tapped identity centrality (IC) inventing whilst three items captured ipf founding with one item capturing IC founding. The last domain (passion for developing) was captured with four items with three items capturing IPF developing and one item tapping IC developing. All the thirteen items were entered into a single EFA and the results revealed a three-factor solution. All items loaded were on these three domains with loading >0.40. These three domains of entrepreneurial passion have received much attention in the literature

(e.g., Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015). The three-factor solution is reported in Table 7.9. From Table 7.9, a three-factor solution showing the three domains of passion for inventing, founding and developing was obtained with a cumulative extracted variance of 63.61%. The eigenvalues were 3.33 (passion for invent), 2.85 (passion for founding) and 2.08 (passion for developing). Table 7.9 below shows the factor matrix of the scale for entrepreneurial passion.

Table 7. 9: Factor Matrix of the Scale for Entrepreneurial Passion

Items	**Factor Loadings**		
	Invent	**Found**	**Devel**
Ipf-INVENT1	.846		
Ipf-INVENT2	.833		
Ic-INVENT1	.811		
Ipf-INVENT4	.802		
Ipf-INVENT3	.767		
Ipf-FOUND3		.826	
Ipf-FOUND2		.798	
Ipf-FOUND1		.788	
Ic-FOUND		.713	
Ipf-DEVEL2			.833
Ipf-DEVEL3			.827
Ipf-DEVEL1			.817
Ic-DEVEL1			.659
Eigenvalue	3.33	2.84	2.09
% Variance explained	25.65	21.89	16.07
KMO: .791			
Bartlett's Tests: 1706.123 (Sig. 0.000)			
% of Variance Extracted 63.61%			
Extraction Method: Principal Component Analysis.			
Rotation Method: Oblimin with Kaiser Normalization.			

Note: IPF=Intense positive feelings; IC=identity Centrality

7.3.4 Scale for Environmental Dynamism

The scale for environmental dynamism was analysed in a single EFA. The EFA results depicted in Table 7.10 shows that only three items out of four items loaded on a single factor. Thus, one of the four environmental dynamism items was removed due to high cross-loadings with other factors. The one factor solution for environmental dynamism was obtained with a cumulative extracted variance of 62.89%. As has been argued in the entrepreneurship and

small business literature, this factor is important for measuring environmental dynamism which refers to the rate of change and degree of unpredictability of factors within an environment (e.g., Duncan, 1972; Daft and Weick, 1984; Miller and Friesen, 1982a; Miller, 1987; Sakarya, Eckman and Hyllegard, 2007; Fini et al., 2009; Fini et al., 2012). Accordingly, the environmental dynamism scale was taken to the next stage of the analysis (simultaneous analysis of all items). Table 7.10 below depicts the factor matrix of the scale for environmental dynamism.

Table 7. 10: Factor Matrix of the Scale for Environmental Dynamism

Items	Factor Loadings
DYNM2	.772
DYNM1	.736
DYNM3	.671
Eigenvalue: 2.58	
% Variance explained: 62.89%	
KMO: 0.811	
Bartlett's Test: 83.14 (Sig. 0.000)	
Extraction Method: Principal Component Analysis.	
a. 1component extracted.	

7.3.5 Passion, Political Ties, Dynamism and Growth Scales

Having performed EFA to assess the individual scales and having selected the items that loaded well (loadings >.40) on their respective factors, it is important to examine the extent to which each item performed in relation to other items. Accordingly, this section provides an account of simultaneous analysis of all items in a single exploratory factor analysis. The EFA results produced six factors in line with what was predicted. Thus, no item was further deleted as all the returned items produced factor loadings >.40. The retained items explained 60.21% of the total variances. As a result, the retained items were considered in the regression analysis. Table 7.11 below depicts the pattern matrix for the EFA for all scales (passion, political ties, environmental dynamism and business growth).

Table 7. 11: EFA for Passion, Political Ties, Dynamism and Business Growth

Items	Factor Loadings					
	INVENT	FOUND	DEVEL	POL	DYNM	GROW
Ipf-INVENT1	.838					
Ipf-INVENT2	.827					
Ic-INVENT1	.809					
Ipf-INVENT4	.802					
Ipf-INVENT3	.781					
Ipf-FOUND3		.822				
Ipf-FOUND2		.801				
Ipf-FOUND1		.792				
Ic-FOUND1		.679				
Ipf-DEVEL2			.828			
Ipf-DEVEL3			.801			
Ipf-DEVEL1			.795			
Ic-DEVEL1			.692			
POL2				.810		
POL3				.723		
POL1				.630		
POL4				.621		
DYNM2					.776	
DYNM1					.722	
DYNM3					.629	
GROW1						.751
GROW2						.613
Eigen value	3.42	3.16	2.36	1.91	1.50	1.06
% Explained Variance	15.46	14.26	10.52	8.53	6.64	4.80

Note: IPF=Intense positive feelings; IC=identity Centrality
KMO: 0.75
Bartlett's Test: 2342.08 (Sig. 0.00)
Only factor loadings > .40 are shown.
Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
% Total cumulative variance explained: 60.21%

7.4 CONFIRMATORY FACTOR ANALYSIS

7.4.1 An Overview

Confirmatory factor analysis (CFA) operates on the notion that it can be used to assess the relationships between a set of observed variables and a set of continuous latent variables (Diamantopoulos and Siguaw, 2009). Thus, CFA is used to examine whether measures of a construct are in line with researcher's conception of the nature of that construct and to assess unidimensionality/consistency of the constructs.

Therefore, in order to assess unidimensionality/consistency of the constructs, CFA was employed. CFA has become widespread in quantitative research in the social sciences (Netemeyer, Bearden and Sharma, 2003; Diamantopoulos and Siguaw, 2009). A key feature of CFA is that the technique is used to test an existing theory (Ping, 2004). Thus, CFA is a statistical technique for testing how well measured variables represent a small number of constructs. The rationale behind factor analytic methods is to reduce the number of variables and examine structure in the relationships between variables. As has been argued by some scholars (e.g., Netemeyer, Bearden and Sharma, 2003; DeVellis, 2003), CFA can aid statistical efforts to reduce scale items. Through CFA, scale reliability can be established in the form of composite reliability (CR) and average variance extracted (AVE). Furthermore, CFA can establish scale validities including convergent validity and discriminant validity (Chou and Bentler, 1995; Ping, 2004).

Accordingly, all the scales that passed the EFA analysis were examined using the CFA technique using the maximum likelihood (ML) method. Indeed, there are several model testing and estimation procedures to scholars in CFA; namely generalised lest square (GLS), asymptotic distribution free (ADF), partial least squares (PLS) and maximum likelihood methods. The current study adopted the ML method as it has been found to be robust under moderate violation of normality (Chou and Bentler, 1995; Boso, Story and Cadogan, 2013). Notwithstanding this notion, the current study did not violate any normality assumption.

A number of scholars have suggested that in assessing the model fit, several fit indices must be reported and these include Chi-square (χ^2) statistic, Root Mean Square Error of Approximation (RMSEA), Non-normed Fit Index (NNFI), Comparative Fit Index (CFI), Joreskog Goodness Fit Index (GFI) and Incremental Fit Index (IFI) (Hu and Bentler, 1995; Hoyle and Panter, 1995; Hair et al., 2006). These fit indices are recommended in the

literature as acceptable ways to evaluate overall fit measurement models (Diamantopoulos and Siguaw, 2009). There is no absolute value for these fit indices to suggest a good fit, yet there are guidelines available for this task. Table 7.12 provides guidelines for some of these indices.

Table 7. 12: Summary of Guidelines for CFA Model Fit Indices

Fit Indices	Guidelines
Chi-square (χ^2)	Insignificant results
Root Mean Square Error of Approximation (RMSEA)	Value < 0.05
Normed Fit Index (NFI)	Value > 0.90
Non-normed Fit Index (NNFI)	Value >0.90
Comparative Fit Index (CFI)	Value > 0.90
Joreskog Goodness Fit Index (GFI)	Value > 0.90
Standardized Root Mean Square Residual (SRMSR)	Value .08 or <

Source: Hair et al., (2006) with insights from Boso, Story and Cadogan (2013)

7.4.2 Measure Construction

To assess unidimensionality/consistency, CFA was performed to estimate the full measurement model with all the items that performed well in the EFA. To achieve this objective, the indicators were constrained to load only on their hypothesised underlying factors (Sirdeshmukh, Singh and Sabol, 2002). Following this view, all the multi-item scales that passed the EFA evaluation were, therefore, entered into CFA model using LISREL 8.7 (Joreskog and Sorbom, 2004). The CFA model in Table 7.13 returned a converged solution with a good fit. This approach is consistent with prior scholarly developments (e.g., Cadogan et al., 2006, Boso, Story and Cadogan, 2013). Table 7.13 presents the results of the full measurement model for the CFA.

According to Baker and Sinkula (1999), items that are conceptually related must be analysed together. Each item was allowed to only load on one construct for which it was an indicator. The first set included the three components of passion: inventing, founding and developing.

The second set comprised political ties, environmental dynamism and business growth. The third set contained the retained in set through set two and these items were modelled simultaneously.

Table 7. 13: Results of CFA Model for the Analysis of all Scales

Construct	Variable	Factor Loadings (with *t*-values)	Standard Errors
Passion for Inventing	Ipf-INVENT1	0.79 (fixed)	-
	Ipf-INVENT2	0.92 (15.33)	0.06
	Ipf-INVENT3	0.96 (13.71)	0.07
	Ipf-INVENT4	0.93(13.28)	0.07
	Ic-INVENT1	0.98(12.25)	0.08
Passion for Founding	Ipf-FOUND1	0.86(fixed)	-
	Ipf-FOUND2	0.89(9.88)	0.09
	Ipf-FOUND3	0.87(8.70)	0.10
	Ic-FOUND4	0.90(11.25)	0.08
Passion for Developing	Ipf-DEVEL1	0.72(fixed)	-
	Ipf-DEVEL2	0.96(13.71)	0.07
	Ipf-DEVEL3	0.79(11.28)	0.07
	Ic-DEVEL4	0.64(10.66)	0.06
Political Ties	POL1	0.84(fixed)	-
	POL2	0.90(10.00)	0.09
	POL3	0.97(10.77)	0.09
	POL4	0.73(9.12)	0.08
Environmental Dynamism	DYNM1	0.69(fixed)	-
	DYNM2	0.88 (9.77)	0.09
	DYNM3	0.83(11.85)	0.07
Business Growth	GROW1	0.86 (fixed)	-
	GROW2	0.94 (10.44)	0.09
Fit indices: χ^2= 319.80; *df*=194; p-value=0.00; RMSEA= 0.04; NFI=0.92; NNFI=0.93; CFI=0.94; IFI=0.94; GFI=0.96; SRMSR=0.046			

Note: IPF=Intense positive feelings; IC=Identity centrality

As can be seen from Table 7.13, the model returned a good solution and all the factor loadings were positive and significant (p<.01). This CFA model included items of the hypothesised theoretical constructs: passion for inventing, passion for founding, passion for developing, political ties, environmental dynamism and business growth. Each construct was

allowed to only load on one construct for which it was an indicator. With regards to the fit indices, the model demonstrated a good fit (i.e. RMSEA= 0.04 NFI=0.92; NNFI=0.93; CFI= 0.94; IFI=0.94; GFI=0.96 and SRMSR=0.05) except the χ^2= 319.80 (*df*=194; p-value=0.00) which was significant at 1% level (p<.01). The NFI is 0.92 which is greater than 0.90 indicating a reasonable fit (Baggozi and Yi, 2012; Boso, Story and Cadogan, 2013).

Table 7. 14: Fit indices for the measurement models

CFA Models	χ^2	DF	χ^2/DF	p-Value	RMSEA	SRMSR	NNFI	CFI	GFI
Measurement (set 1)	146.49	92	1.59	.13[a]	.03	.04	.96	.96	.98
Measurement (set 2)	163.46	53	3.08	.01	.05	.03	.98	.98	.95
Full measurement (set 3)	319.80	194	1.65	.00	.04	.04	.93	.94	.96

Measurement (set 1): Passion for inventing, passion for developing and passion for founding
Measurement (set 2): political network ties, perceived environmental dynamism and firm growth
Measurement (set 3): all items retained in set 1 through to 2 were modelled simultaneously
RMSEA: root mean square error of approximation
NNFI: non-normed fit index
CFI: comparative fit index
SRMSR: standardized root mean square residual
a Not significant at α=0.05

Moreover, the standard errors for the items were quite low. As a consequence, the model result provides support for the robustness of the measurement items used (Ping, 2004). Following this view, the present study depended on the parameters from CFA model for further analysis.

7.5 CREATING MEASUREMENT INDEX

7.5.1 Entrepreneurial Passion

This study used an aggregation heuristic, arguing that the first-order reflective constructs (founding, founding and developing) define the formative latent composite (e.g., Lee and Cadogan, 2013; Finn and Wang, 2014; Rigdon, 2014; Lee, Cadogan and Chamberlain, 2014). The passion domains were combined formatively and an average score was computed across the three entrepreneurial passion domains. Having computed this average, it was assumed that the present study was ready to test for the aggregate influence and the moderator effect model described in Chapter 5.

7.5.2 Political Ties

Four items measured the political ties constructs. The political ties constructs was included in the conceptual model as a moderator variable (see the conceptual model in Chapter 5). The four items were averaged and a composite score was derived. The political ties composite score (POL) was subsequently used as a moderator to test its effect in the conceptual model.

7.5.3 Environmental Dynamism

Three items measured the environmental dynamism construct. This construct represents the only environment moderator in the conceptual model. Accordingly, the three items that captured the environmental dynamism construct were averaged and a composite score was obtained. The environmental dynamism score (DYNM) was subsequently used to test its moderating effects on the conceptual model.

7.5.4 Business Growth

For the purpose of hypotheses testing, the present study followed conventional practice (e.g., Anderson and Eshima, 2013) in creating a composite score for business growth. A two-item, five-point subjective performance scale measured business growth. These are sales growth rate and employee growth rate. To create a measure index for this variable, the present study calculated the mean scores of sales growth rate and employee growth rate and the combined mean of the scale measures constitutes the variable score. Stated mathematically, business growth = (sales growth rate + employee growth rate)/2. Businesses that scored higher on the business growth rate stated higher levels of overall growth relative to rivals in the manufacturing industry.

7.5.5 Control Variables

As has been pointed out, seven control variables were employed in this study to account for exigencies that may influence the research model. The variables include prior growth (Baum and Locke, 2004; Hmieleski and Baron, 2009), firm size (Baum and Locke, 2004; Wiklund and Shepherd, 2005), firm age (Pugh, Hinings, and Turner, 1968; George, 2005), founder's age (McGee and Sawyer, 2003; Andersson et al., 2004; Cassar, 2006), gender (Goffee and Scase, 1983; Aldrich, 1989; Cassar, 2006) and founder's education (Storey, 1994; Smallbone and Wyer, 2000; Kozan, Oksoy and Ozsoy, 2006) and founder's prior working experience (Smallbone and Wyer, 2000).

7.5.5.1 Prior Growth

Studying business growth may have some aspects of prior growth (Baum and Locke, 2004; Hmieleski and Baron, 2009). Following this view, the present study included two items to isolate the variance of past business growth (Baum and Locke, 2004). These are (i) the percentage change in sales between 2011 and 2012 [(2012/2011)-1.0] and (ii) the percentage change in employment between 2011 and 2012 [(2012/2011)-1.0]. Prior growth was found to be 5.11% in this study. In the present study, prior growth was created by following the above procedure. This procedure has been utilised in previous entrepreneurship studies (e.g., Low and MacMillan, 1988; Baum and Locke, 2004; Hmieleski and Baron, 2009).

7.5.5.2 Firm Size

Several scholarly studies have found a positive relationship between size and business growth (e.g., Roper, 1999; van Biesebroek, 2005). This suggests that firm size can influence the measurement model and therefore was included in the conceptual model as a control variable given its association with small firm growth literature (Baum and Locke, 2004; Wiklund and Shepherd, 2005). Firm size was measured by total number of full-time employees. This

approach to measuring firm size is consistent with prior scholarly studies (Baum and Locke, 2004).

7.5.5.3 Firm Age

The literature suggests that age has a major influence on business growth. It has been found that younger firms grow faster than older businesses (Kangasharju, 2000; Lotti et al., 2003). Therefore, firm age was included as a control variable. Following prior scholarly studies, firm age was measured by the number of years that the business has been in operation (Lotti et al., 2003; Baum and Locke, 2004).

7.5.5.4 Founder Age

Age of the entrepreneur plays an important role in the growth orientation of small businesses. Empirical research evidence on the relationship between the entrepreneur's age and business growth has been inconclusive. For example, while some evidence shows a negative association between owner-manager's age and growth rates (Wynaeczyk et al., 1993; Abouzeedan and Busler, 2004), other empirical evidence (McGee and Sawyerr, 2003; Andersson et al., 2004) suggests a positive relationship between these variables. What appears to emerge from the literature is that middle-aged entrepreneurs are more likely to use their past experience to run a growing business than young entrepreneurs (Storey, 1994; Carter and Jones-Evans, 2006). The present study controlled for founder's age as growth preferences have been found to vary with entrepreneurs' age (McGee and Sawyerr, 2003; Andersson et al., 2004; Cassar, 2006). Founders' age was measured number of years of the respondents (Lee et al., 2011). The average age of the respondents was 49.3 years.

7.6.5.5 Gender

The impact of the gender on growth of small businesses has been investigated by several studies. Several scholarly studies (Goffee and Scase, 1983; Aldrich, 1989) have produced evidence that suggests that female entrepreneurs are at a disadvantage to achieving higher growth rate due to family and educational related issues. This point is supported by Rosa, Carter and Hamilton (1996) revealing that the growth rates of businesses owned by female entrepreneurs are lower than their male counterparts. Following this view, the present study controlled for gender using a dummy variable (0= female; 1= male).

7.5.5.6 Education

The present study included educational level of the respondents because prior studies suggest a positive relationship between educational background and/ or training qualifications and business growth (Storey, 1994; Smallbone and Wyer, 2000; Kozan, Oksoy and Ozsoy, 2006). Further, empirical research evidence suggests that entrepreneurs' educational background affects their motivation, increases skills, foresight and communication skills (Smallbone and Wyer, 2000; Dobbs and Hamilton, 2007) and this can improve business growth. Thus, entrepreneurs that have higher education are expected to have a higher likelihood of success that their less educated counterparts. Following this notion, entrepreneurs' level of education was included as a control variable. Respondents' educational level was measured as follows: (1= ''high school'', 2= ''HND'', 3= ''bachelor's degree'', 4= ''postgraduate degree''.

7.5.5.7 Entrepreneurs' Past Working Experience

Past experience of the entrepreneur has been proved to have a positive relationship with business performance (Gill, 1985; Singer, 1995). Gill (1985) indicated market knowledge gained in previous managerial position is vital for improving business growth. Storey (1994) showed that there is a positive relationship between previous management experience and

high growth rates. This suggests that if entrepreneurs past working experience are not controlled, it can potentially influence the outcome of the study's results. Entrepreneurs' working experience was created by taking average of the number of years the entrepreneurs had worked. On the average, the entrepreneurs have worked for 5 years before they established their ventures.

7.6 SCALE RELIABILITY AND VALIDITY ANALYSIS

Having obtained EFA and CFA solutions for the scales and having refined the constructs, the respective scale reliabilities were examined. Scale reliability is important in management research since summated scales are an assembly of interrelated items designed to measure underlying constructs (Nunnally, 1978). According to Bryman (2008: 149) ''reliability refers to the consistency of a concept''. Similarly, Zikmund (2003) indicated that reliability reflects the degree to which measures are free from error with a high degree of producing consistent results. According to Bryman (2008) the use of Cronbach's alpha to assess internal reliability is common in social science research.

The current study used Cronbach's alpha and composite reliability methods to assess the reliability of the measures. Cronbach's alpha determines the internal consistency of items to establish its reliability (Cronbach, 1951). Several scholars have suggested that to achieve scale reliability Cronbach's alpha value should be above 0.60 for exploratory research and 0.70 for confirmatory research (Nunnally, 1978; Nunnally and Bernstein, 1994).

Previous studies have expressed different opinions on an acceptable alpha value. For example, Field (2009) indicated that an alpha value of 0.70 to 0.80 is acceptable value of Cronbach's alpha in determining the internal reliability of a measure. Bryman (2008) also argued that the figure 0.80 is typically employed as a rule of thumb to indicate an acceptable level of internal reliability. Table 7.15 presents the scale reliability results depicted by

Cronbach's alpha values. As shown in Table 7.15 the scale reliability results of the current study range from 0.85 to 0.94. Additionally the current study assessed composite reliability (CR) of the scales used. CR is a structural equation model (SEM) reliability statistic that is similar to Cronbach alpha value (Baum and Locke, 2004). The rule of thumb is that CR values should exceed .60 for exploratory model testing (Hayduk, 1987). CR of the study's measures was above the threshold of .60. This suggests that the current study achieved high scale reliability for all the studied constructs (Nunnally and Bernstein, 1994).

Regarding the validity of the scales, it has been argued that CFA procedures can be used to examine aspects of validity (Ping 2004). Following this view, the present study conducted CFA of all scales using average variance extracted (AVE) and composite reliability (CR) techniques to establish validity and reliability of the scales. In assessing the reliability of the individual items, the present study calculated a composite reliability value for each latent variable. To achieve this objective, the present study used the information on the indicator loadings and error variances from the completely standardised solution (Diamantopoulos and Siguaw, 2009). In fact, convergent validity of the scales (which refers to the degree to which two measures of constructs that theoretically should be related, are in fact related) were established since all the items loaded on their original constructs without cross loadings and correlated errors (Ping, 2004). It can be observed from Table 7.15 that all composite reliabilities comfortably exceed the 0.60 threshold (Ping, 2004).

AVE refers to the amount of variance that is captured by the latent variable in relation to the amount of variance due to its measurement error (Fornell and Larker, 1981; Dillon and Goldstein, 1984). Thus, AVE measures error-free variance of a set of items. According to Fornell and Larcker (1981) AVE measures can be used to achieve convergent validity. Indeed, AVE is an indication of how much of the variance of latent variable is captured by

the set of observed variables. This study achieved discriminant validity by calculating the square roots of AVE for all multi-item constructs (See Table 8.1). The results revealed that, for all constructs, each correlation of one construct with another is less than the square root of its AVE, suggesting discriminant validity of the study's measures (Fornell and Larcker, 1981). Table 7.15 below depicts a summary of predictor measures, scale reliability and validity.

Table 7. 15: Predictor Measures and Scale Reliability and Validity Analysis

Constructs	Composite Reliability*	Average Variance Extracted (AVE)**	Cronbach's Alpha	Research Reference
Passion for Inventing	0.87	0.73	0.87	Cardon et al., (2013)
Passion for Founding	0.81	0.69	0.91	Cardon et al., 2013
Passion for Developing	0.80	0.63	0.95	Cardon et al., 2013
Environmental Dynamism	0.85	0.71	0.88	Miller and Friesen (1982a)
Political ties	0.84	0.64	0.85	Acquaah (2007)
Business growth	0.87	0.67	0.89	Anderson and Eshima (2013)
Prior growth	.93	.78	-	Low and MacMillan (1988; Baum and Locke, 2004)

*Composite reliability (CR) = the sum of the square roots of the item-squared multiple correlations squared and divided by the same quantity plus the sum of the error variances (Werts, Linn and Joreskog, 1974). **AVE=$\Sigma[\lambda_i^2]Var(X)/\Sigma[\lambda_i^2]Var(X)+\Sigma[Var(\varepsilon_i)]$ where λ_i is the loading of x_i on X, Var denotes variance, ε_i is the measurement error of x_i, and Σ denotes a sum (Fornell and Larker, 1981).

As argued by Diamantopoulos and Siguaw (2009), AVE value less than 0.50 suggests that measurement error accounts for a greater amount of the variance in the indicators than does the underlying later variable; hence can raise eyebrows about the soundness of the indicators and the latent variable. As can be observed from Table 7.15, AVE values ranged from 0.63 to 0.78. This indicates that measurement error accounts for a lesser amount of the variance in the indicators than does the underlying latent variable.

In conclusion, the assessment of the measurement part revealed strong evidence to suggest validity and reliability for the operationalisation of the latent variables. On the whole, the assessment of the measurement part did not highlight any deficiencies.

7.7 COMMON METHOD ANALYSIS

This study relied on entrepreneurs as single source for information, therefore some of the variables of interest may produce specious relationships due to common method bias. According to Podsakoff (2003), scholars can deal with common method variance either procedurally or statistically. Procedurally, a greater care was taken to separate the dependent and independent variables during the data collection stage of the study. Statistically, this study followed previous scholarly studies (e.g., Cote and Buckley, 1987; Boso, Story and Cadogan, 2013) and estimated three competing models to check whether common method variance was a major concern (Table 7.16).

Table 7. 16: Common Method Bias Nested Models

Models	χ^2	df	χ^2/df	RMSEA	NNFI	CFI
M1: trait	6315.89***	1055	5.98	.163	.19	.25
M2: Method	1417.72***	1046	1.35	.044	.93	.94
M3: Trait-method	1205.22***	963	1.25	.47	.92	.95

******* $p < .001$. df=degrees of freedom; RMSEA=Root mean square error of approximation; CFI=Comparative fit index; NFI= Non-normed fit index.

In model 1, this study estimated the trait-only model in which all the indicators loaded on a single latent factor and Model 2 involved a method-only model in which each indicator was loaded on its respective latent factor. Model 3 involved a method and trait in which a common factor was included to link all the indicators in Model 2. When all the three models (Table 7.16) are compared, it reveals that Models 2 and 3 are better than Model 1 and Model 3 is not, to a large extent, better than Model 2. This suggests that the variance in responses from the survey data is explained by the simultaneous effect of traits, method, and random

error (Fini et al., 2012). This shows that common method bias is a major concern in the data used in the present study (Boso, Story and Cadogan, 2013).

7.8 DESCRIPTIVE ANALYSIS OF INDIVIDUAL SCALES

Before the regression models were built, a descriptive analysis of each scale was performed to ensure that the data are ready for regression and to also ensure that each scale was ready for hypotheses testing. Accordingly, each descriptive analysis was performed to examine the assumption of normality. The normality assumption is the assumption that the observed distribution of the measures differed significantly from normal distribution (Field, 2009). Normality was, therefore, examined through histograms and the Kolmogorov-Smirnoff (KS) test. According to Hair et al., (2006) a non- significant KS result suggests that the distribution has achieved normality.

However, some scholars contended that the KS test is likely to be sensitive to any small deviation from normality (e.g., Sharma, 1996; Hair et al., 2006; Field, 2009). For this reason, it is advised that the Z-values of skewness and kurtosis be computed (Sharma, 1996; Field, 2009). To infer the normal distribution of the scales, it is recommended that their Z-values should be less than the critical value of 1.96 for an alpha value of 0.05 (Sharma, 1996; Field 2009). Accordingly, the current study performed descriptive statistics of the scores for each scale where KS, skewness and kurtosis scores computed. According to Field (2009) kurtosis values should be below the upper threshold of 3.29. Results of the descriptive statistics are presented in Tables and graphs. Tables 7.17 and 7.18 depict descriptive statistics of the scales.

Table 7. 17: Descriptive Statistics of the Scales*

	Mean		Std. Dev.	Skewness		Kurtosis		Z-scores	
	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error	Skewness**	Kurtosis***
PASSION	3.68	.029	0.54	-0.00	0.13	-0.32	0.26	0.02	1.23
DYNM	3.73	.041	0.77	-0.00	0.15	-0.23	0.25	0.00	0.88
PINVENT	3.20	.056	0.95	-0.00	0.12	-0.25	0.22	0.03	0.96
PFOUND	3.92	.052	0.95	-0.15	0.17	-0.10	0.27	1.20	0.41
PDEVEL	3.04	0.04	0.95	-0.19	0.11	-0.27	0.22	1.51	1.06
POLTIES	3.22	0.05	1.06	-0.15	0.10	-0.12	0.25	1.54	0.47
GROWTH	3.38	0.05	0.93	-0.26	0.14	-0.28	0.27	1.16	1.08

*Likert-scales 1-5; Valid N=346; **Z=scores of skeweness are calculated by subtracting skewness statistic from 0 and the result divided by standard error of skewness. ***Z=scores of kurtosis are calculated by subtracting kurtosis statistic from 0 and the result divided by standard error of kurtosis.

Table 7. 18: Test of Normality (Kolmogorov-Smirnov)

Variable	Statistic	Df	Sig.
Environmental dynamism	.048	346	.071
Passion for inventing	.163	346	.080
Passion for founding	.075	346	.090
Passion for developing	.144	346	.060
Political ties	.132	346	.058
Business growth	.159	346	.080
Entrepreneurial passion	.046	346	.071

Further, results of the descriptive analyses are presented in Figures 7.1 to 7.7. Results from the analyses suggest that none of the scores deviated significantly from normality. Hence, the scales are suitable for hypotheses testing (Sharma, 1996; Field, 2009). Thus, if the data is normally distributed it suggests that it would be a good measure of the variables (Hair et al., 2006).

7.8.1 Passion for Founding

Figure 7.1 presents a histogram of the final passion for founding scale. With responses ranging from a minimum of 1 to a maximum of 5, the scale's mean value was 3.92 and standard deviation was 0.95. Figure 7.1 demonstrates that the distribution was slightly skewed to the right but normally distributed. A Kolmogorov-Smirnov from Table 7.18 revealed a non-significant result (Sig. 0.090) suggesting no deviation from normality. A further analysis showed that, skewness and kurtosis results revealed values of -.0158 and -0.109 respectively. The Z-scores for skewness and kurtosis from Table 7.18 above were 1.201 and 0.418 respectively suggesting the scale was normally distributed (Sharma, 1996; Field, 2009). Figure 7.1 below depicts the passion for founding frequency distribution.

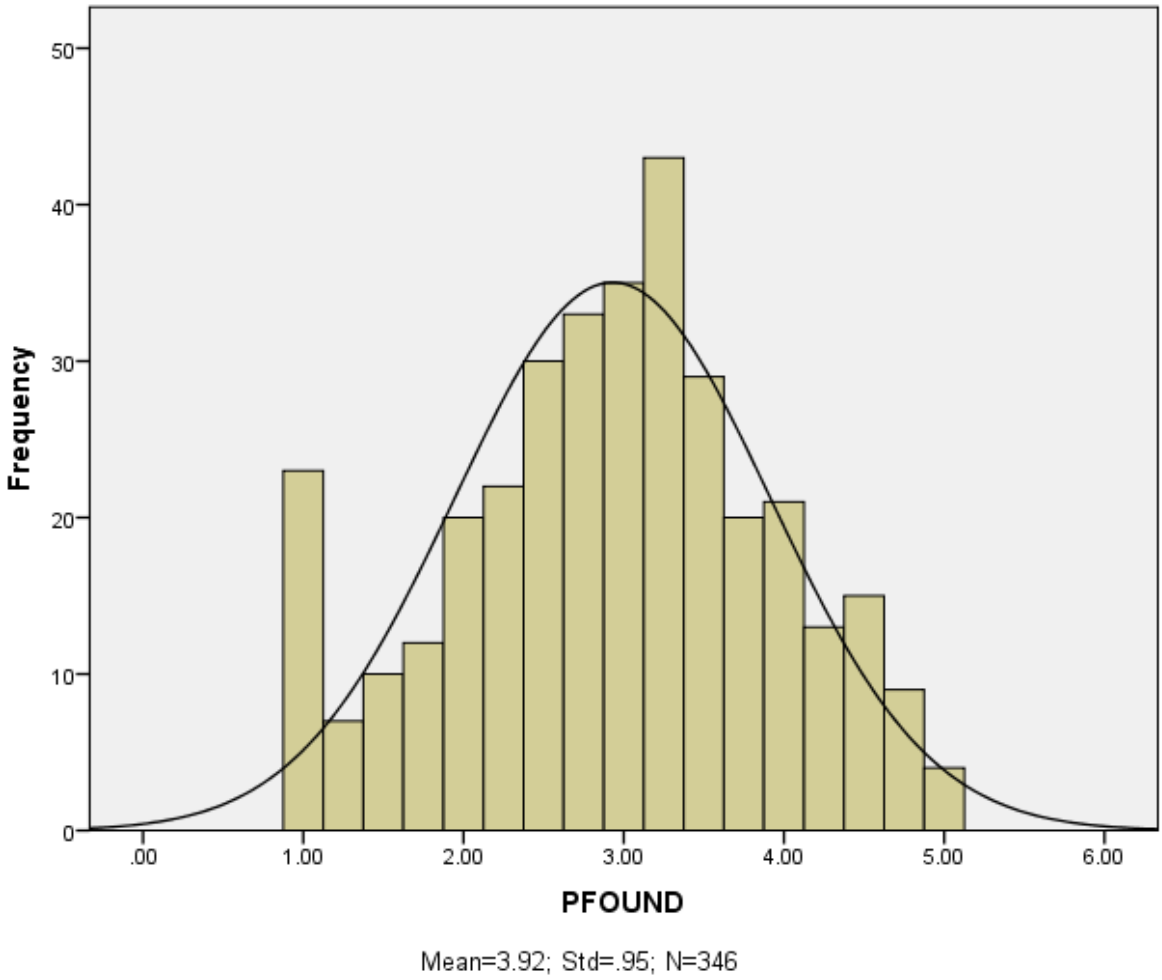

Figure 7. 1: Passion for Founding Frequency Distribution

7.8.2 Passion for Inventing

Figure 7.2 depicts the histogram for the final passion for inventing scale which demonstrates no missing values. The mean value for the scale was 3.20 and its standard deviation was 0.95. Responses were obtained from a minimum of 1 to a maximum of 5. Figure 7.2 shows that, the scale was slightly positively skewed to the right but further tests suggest that there is no cause for concern. Accordingly, a KS test was performed and a non-significant result (sig. 0.80) was found. As has been indicated by some scholars (e.g., Sharma, 1996; Field, 2009), a non-significant KS result suggests that the scale is normally distributed. In order to add further

insights to the normality of the scale, a further analysis was performed and the scale revealed skewness and kurtosis values of 0.004 and -0.251 respectively. The Z-scores for skewness and kurtosis were 0.030 and 0.962 respectively which are less that the critical value of 1.96 for an alpha of 0.05 (Sharma, 1996; Filed, 2009). This provides support for the notion that the variable was normally distributed. Accordingly, the scale was retained for hypothesis testing. Figure 7.2 below shows the passion for inventing frequency distribution.

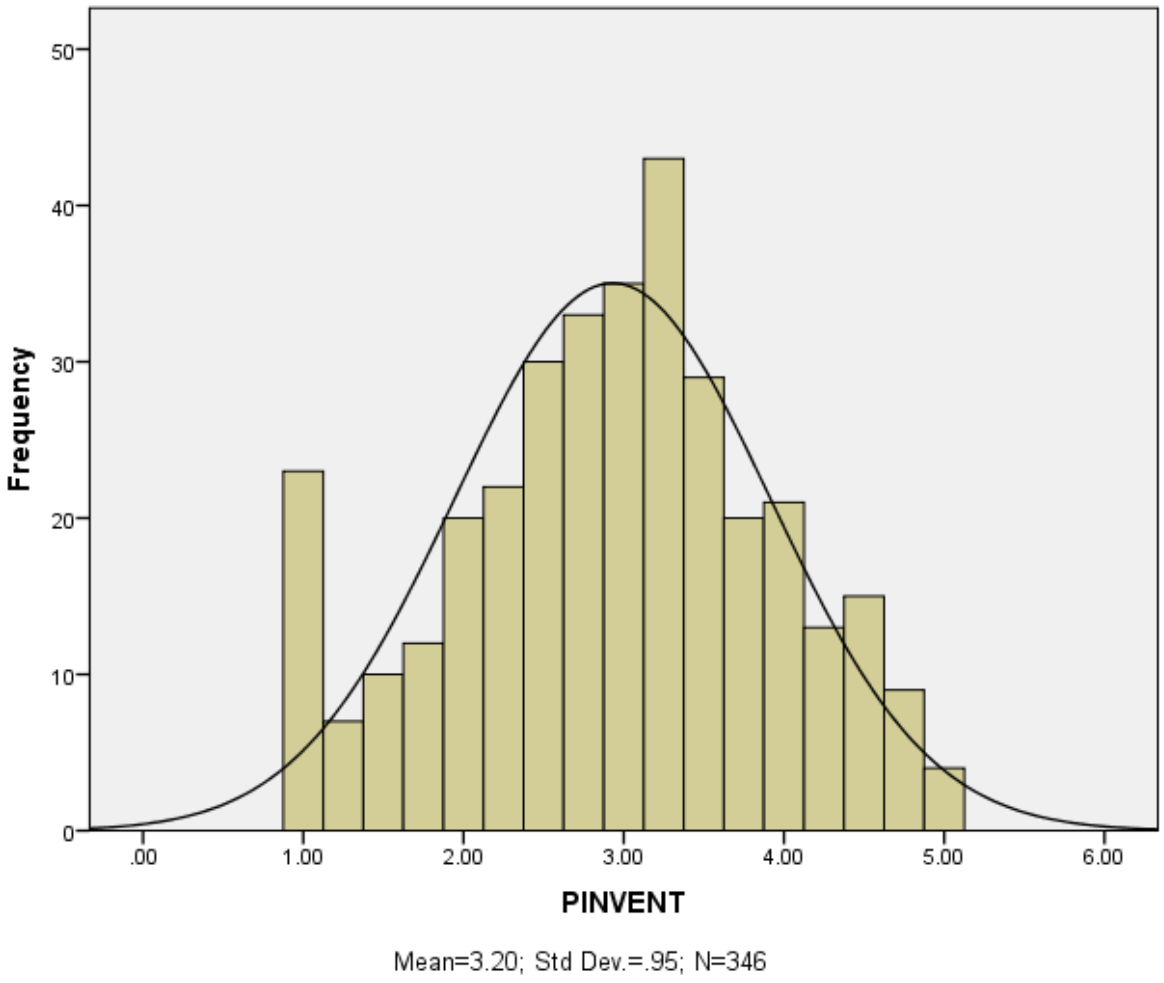

Figure 7. 2: Passion for Inventing Frequency Distribution

7.8.3 Passion for Developing

Figure 7.3 depicts the frequency distribution of the passion for founding scale and like other entrepreneurial passion scale, no missing values were observed for this scale. The mean value for the scale was 3.94 and its standard deviation was 0.86. The response ranged from a minimum of 1 to a maximum of 5. A KS test was performed to evaluate the normality of the scale. However, a non-significant result (Sig. 0.09) was returned suggesting that the scale was normally distributed and therefore could be used for model testing in its current state. In order to add further insights, a further analysis was performed to evaluate the normality of the scale. A further analysis revealed skewness and kurtosis values of -0.19 and -0.27 respectively. The scale returned Z-score for skewness and kurtosis of 1.51 and 1.06 providing support for the view that the scale is normally distributed (Sharma, 1996; Field, 2009). Accordingly, the scale was taken up for hypothesis testing of the model.

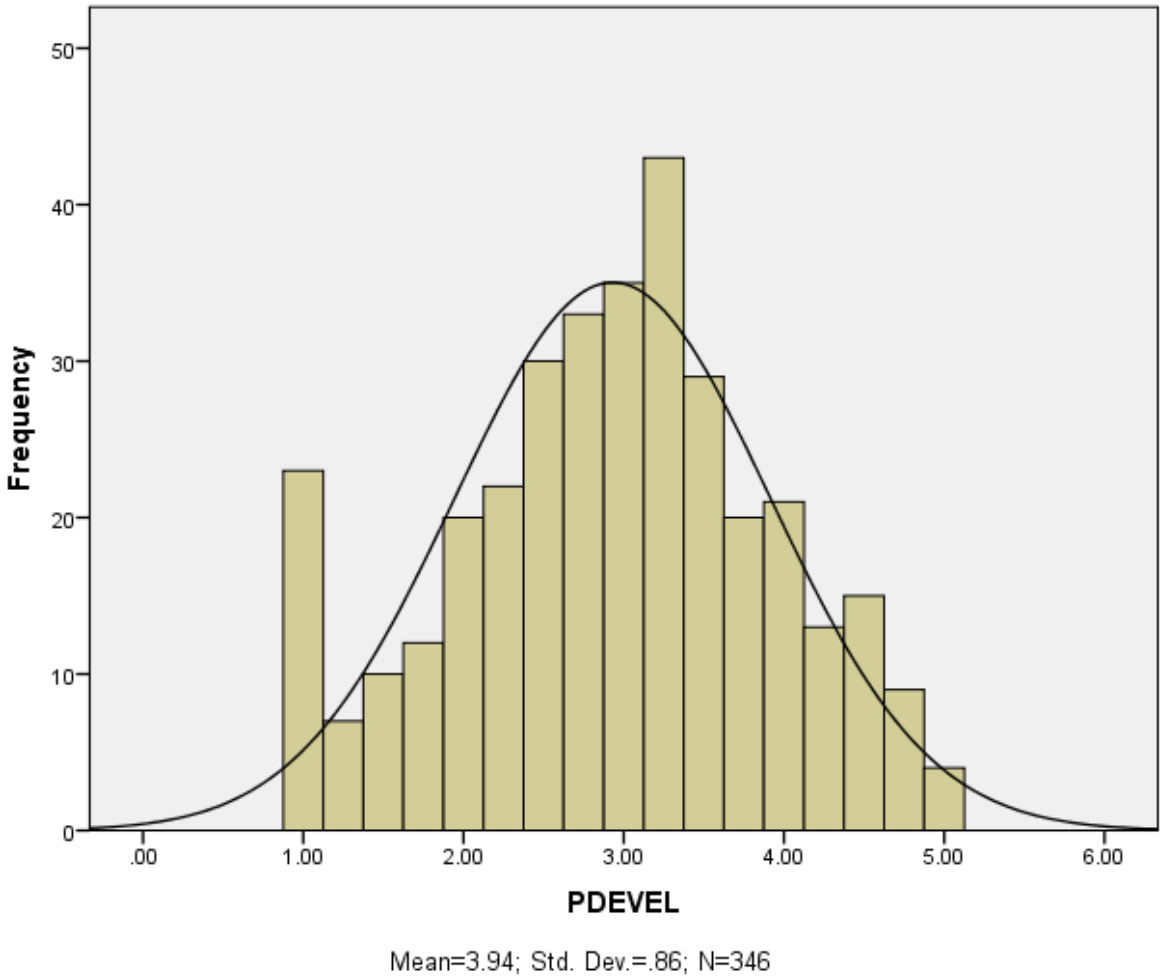

Figure 7. 3: Passion for Developing Frequency Distribution

7.8. 4 Political Ties

Figure 7.4 provides information on the frequency distribution of the political ties scale with no missing values. The mean value was 3.23 while the standard deviation was 1.06. Responses were received from a minimum of 1 and a maximum of 5. A KS test (Sig. 0.05) was performed and it returned a non-significant result indicating a significant deviation from normality. Therefore, further analyses were required to examine the normality of the political ties scale. Accordingly, a further analysis indicated that the variable returned skewness and kurtosis values of -0.53 and -0.12 respectively. The Z-scores for skewness and kurtosis were 1.54 and .047 respectively which

therefore provide further insights of the notion that the variable was normally distributed (Sharma, 1996; Field, 2009). The scale was therefore retained in its present form for hypothesis testing.

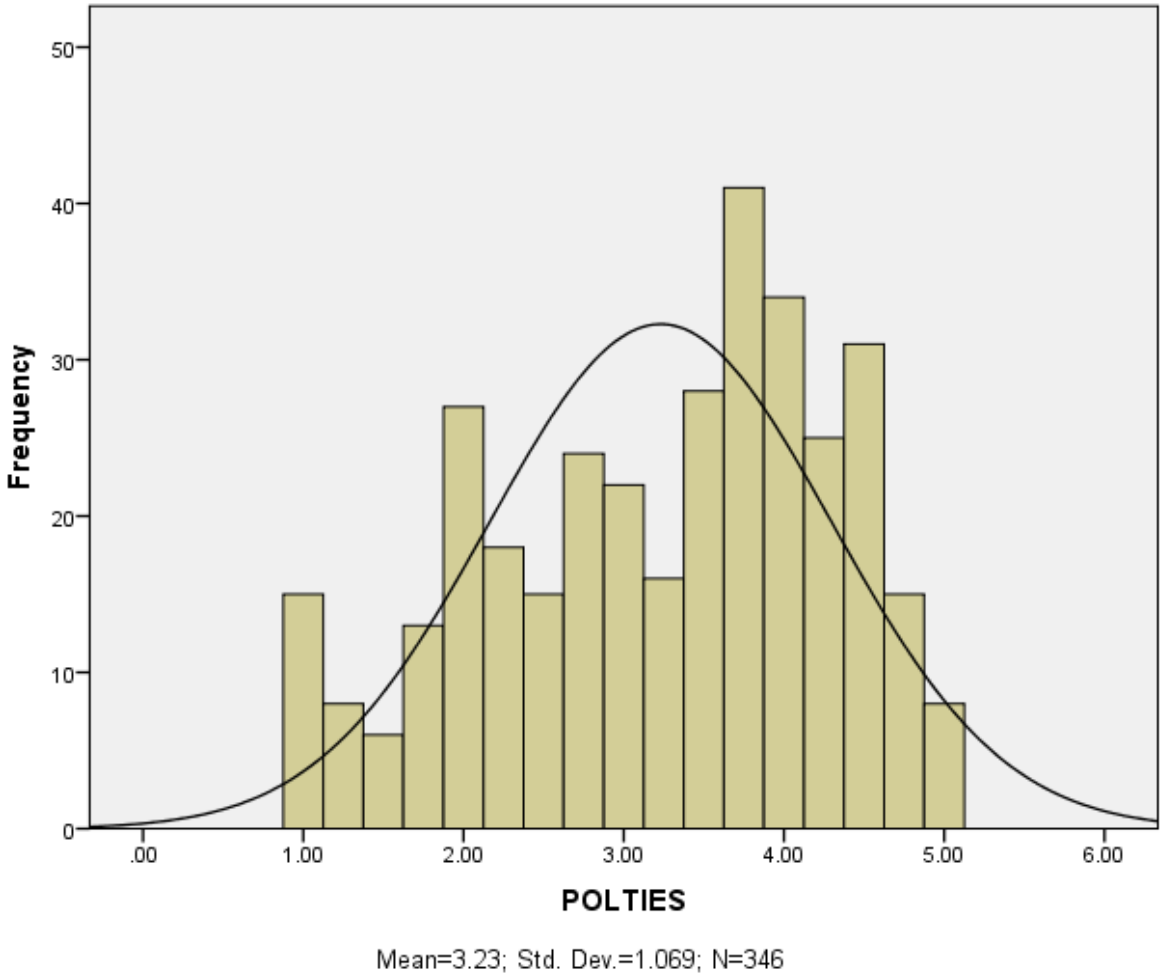

Figure 7. 4: Political Ties Frequency Distribution

7.8.5 Environmental Dynamism

Figure 7.5 presents the histogram for the environmental dynamism scale which shows no incidence of missing value. The scale's mean value was 3.73 and its standard deviation was 0.77. The response ranged from a minimum of 1 to a maximum of 5. A KS test revealed a non-significant result (Sig. 0.71), which is taken to mean that the scale was normally distributed (Field, 2009). Therefore, the

environmental dynamism measure is argued to demonstrate sufficient robustness. Accordingly, the measure was taken for model testing.

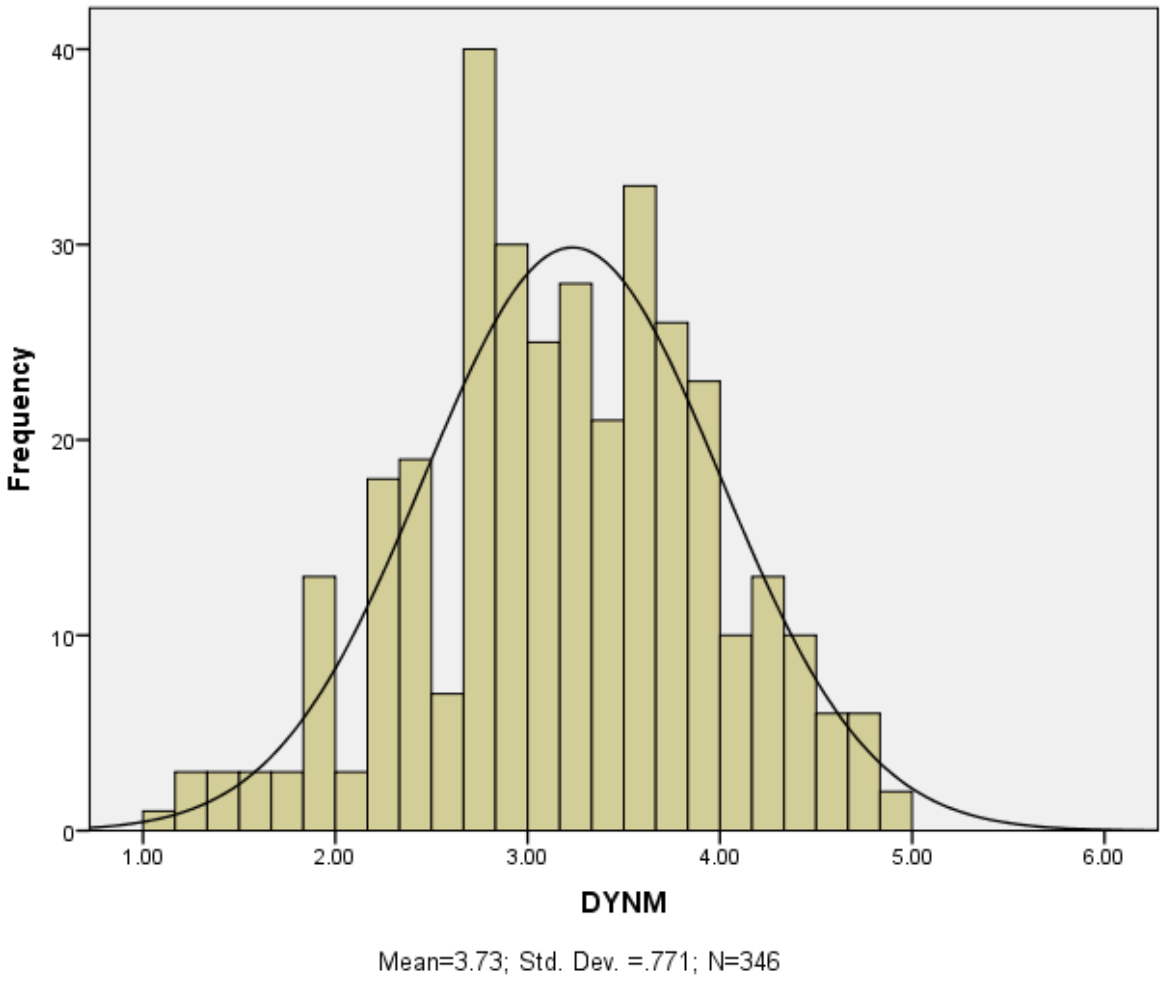

Figure 7. 5: Environmental Dynamism Frequency Distribution

7.8.6 Entrepreneurial Passion

Figure 7.6 presents the frequency distribution of the overall entrepreneurial passion scale showing no observation of missing values. The mean value was 3.68 while the standard deviation was 0.85. Responses ranged from a minimum 1 and a maximum 5. A KS test was performed and the result showed a non-significant value of 0.71 suggesting no significant deviation form normality. However, to add further insights in examining the normality of the

entrepreneurial passion scale, further analysis was performed. The result showed skewness and kurtosis values of -0.00 and -032 respectively. The Z-scores for skewness and kurtosis were 0.02 and 1.23 respectively. Consequently, the entrepreneurial passion scale is argued to display sufficient robustness (Field, 2009). Accordingly, it was deemed ready for model testing. Figure 7.6 below shows the overall entrepreneurial passion frequency distribution.

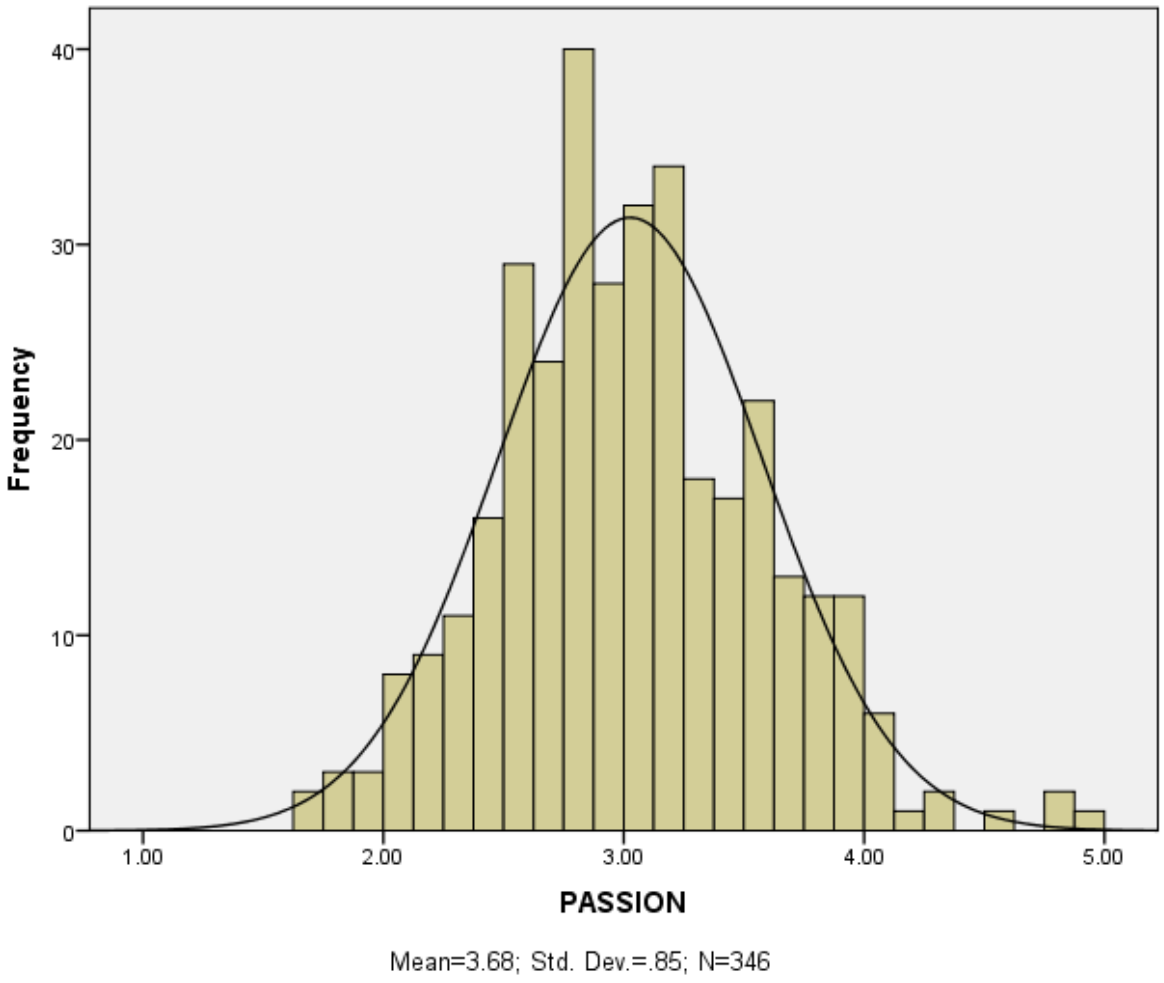

Figure 7. 6: Overall Passion Frequency Distribution

7.8.7 Business Growth

Figure 7.7 presents the frequency distribution of the business growth scale. The business growth scale consists of two items: sales growth and employment growth. Observed values ranged from 1to 5 with mean of 3.39 and a standard deviation of .093. A non-significant KS result of 0.08 was found. This suggests that the scale was suitable for hypothesis testing (Sharma, 1996; Field, 2009). However, to add further insights into the normality of the business growth scale, further analysis was performed. A further analysis showed that the business growth variable returned skewness and kurtosis values of -0.26 and -0.28 respectively. The Z-scores for skewness and kurtosis were 1.16 and 1.08 respectively which provide support for the notion that the scale was suitable for use in model testing.

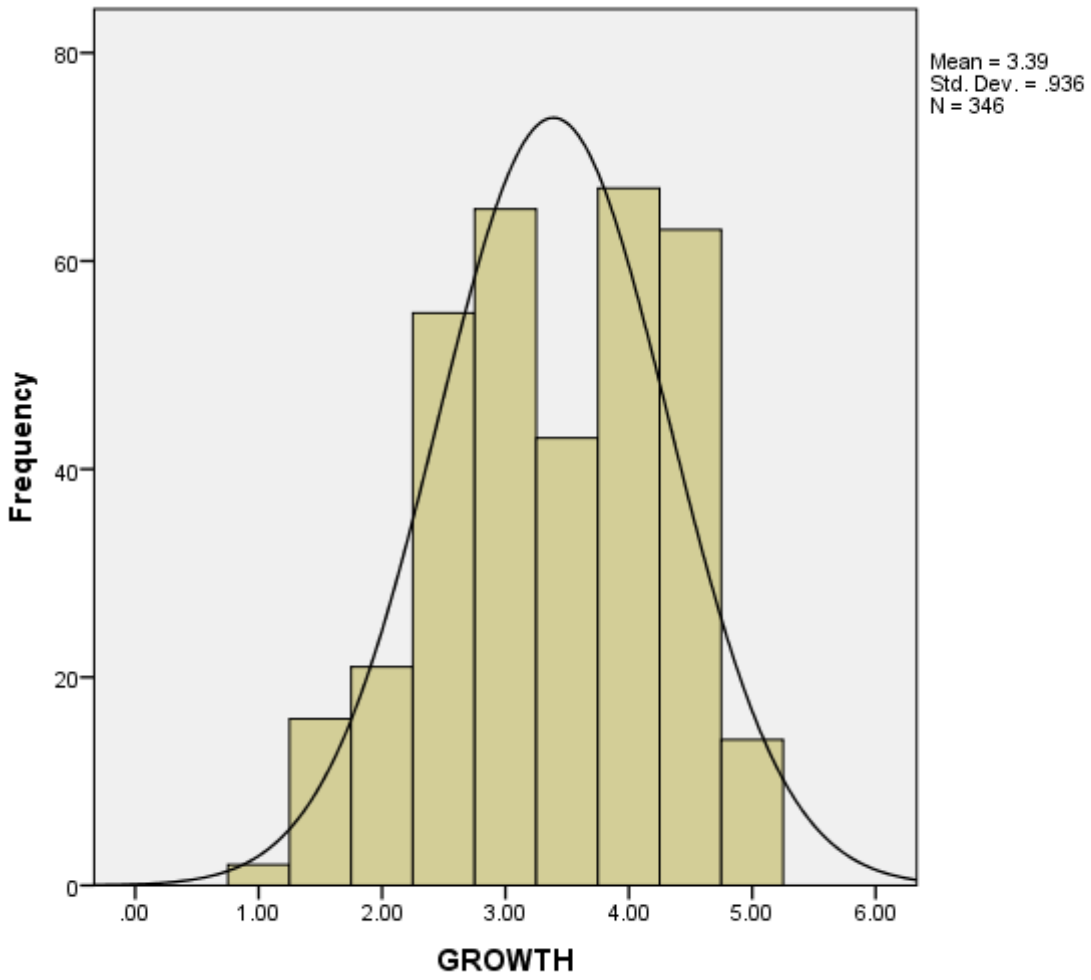

Figure 7. 7: Business Growth Frequency Distribution

7.9 CHAPTER SUMMARY

The purpose of this chapter was to perform a descriptive analysis of the sample and present the results of purification of the items and scales used in this study. Accordingly, this chapter presents descriptive statistics and exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) of the scales used in the study. Thus, this chapter presented the procedures for item selection and item analysis using EFA. Additionally, this chapter presented the dimensionality and validity assessment procedures using CFA. This chapter concludes with an

account of frequency distribution of the scales to assess the normality of the variables used in the hypotheses testing.

PART IV: RESULTS, DISCUSSION AND CONCLUSION

CHAPTER 8

HYPOTHESES TESTING AND STUDY RESULTS

8.1 INTRODUCTION

This study hypothesised in Chapter 5 that entrepreneurial passion positively relates to business growth. In addition, the current study contended that entrepreneurial passion would be more beneficial to business growth if political ties and environmental dynamism were high. Further, this study argued that entrepreneurial passion domains might relate to business growth. The present study also argued that, similar to the overall entrepreneurial passion construct, the effect of *specific* entrepreneurial passion domains on small business growth might depend on the level of political ties and the degree of environmental dynamism.

Following these arguments, the purpose of this chapter, therefore, was to examine the regression technique used to test the study's hypotheses and to discuss the results of the hypotheses formulated in chapter 5. To achieve this purpose, the chapter is divided into three sections. First, the regression technique used to test the hypotheses and its assumptions are explored. Second, an approach to the overall hypothesis testing in the current study is highlighted and the results are presented and discussed in this section. This section concludes with a summary of the results.

8.2 REGRESSION ANALYSIS FOR HYPOTHESES TESTING

The current study adopted the ordinary least square (OLS) regression approach to test the relationships among the constructs in the conceptual model developed in chapter 5. The OLS technique estimates the unknown parameters in a linear regression model (Field, 2009). As has been stated by Hair et al., (2006), the OLS hierarchical regression gives useful insights for

examining direct relationships between sets of variables in quantitative studies. Hierarchical regression is considered appropriate when evaluating research models that involve contextual and configurational aspects (Cohen et al., 2003). It is the 'workhorse' of research analytical techniques being the most often used estimator in entrepreneurship (Stinchcombe, 2005). The hierarchical regression method is to enter variables in blocks successively to assess whether the next higher-order interaction(s) produce a statistically significant addition to the total of explained variance (Wiklund and Shepherd, 2005). In addition a test for a configuration effect is available, when the coefficient of a three-way interaction term is statistically significant and the F test shows that there is a significant increase in the overall model fit (Cohen et al., 2003; Verbeek, 2002; Anderson and Eshima, 2013). In this case, the OLS technique offers the opportunity for examining the interrelationships between the constructs in the current study, which is in line with the study's agenda.

Before the regression models were built, certain analyses were conducted to examine the assumptions underlying regression analysis. As has been stated in Chapter 7 (see Section 7.8) all variables used in the current study were subjected to normality test and the results showed that the variables were suitable for model testing. This suggests that the data was suitable for OLS modelling in terms of data normality. However, before proceeding to test the study's hypotheses specified in chapter 5, it is worthwhile to first highlight a number of statistical assumptions underpinning the multiple regression technique.

8.2.1 Assumptions Underpinning the Multiple Regression Technique

There are several statistical tests that quantitative analysis must undertake in order to satisfy the assumptions that underpin multiple regression analysis. As such, when these assumptions are

violated the results may result in a Type I (i.e. incorrect rejection of a true null hypothesis) or Type II error (i.e. failure to reject a false null hypothesis). For example, Hair et al., (2006) argued that a significant violation of these assumptions may produce spurious conclusions. According to Pedhazur (1997: 33) ‘‘knowledge and understanding of the situations when violations of assumptions lead to serious biases, and when they are of little consequence, are essential to meaningful data analysis’’. The literature suggests four assumptions that are not robust to violation, and that scholars can deal with them if violated (Osborne, et al., 2001). These assumptions include linearity, independence, homoscedasticity, and normality. Therefore, to draw valid conclusions from the study, these assumptions must be satisfied. The sections that follow next discuss these assumptions and how they were treated in this study.

8.2.1.1 Normal Distribution

The residuals from an OLS regression equation must be normally distributed. Indeed, a sample can suffer from two kinds of non-normal distributions, i.e. skewness and kurtosis (Hair et al, 2006). When the normal distribution assumption is tested, scholars can obtain several pieces of information that are useful in determining the normality of the data. For example, data plots, skew, kurtosis, and P-P plots offer scholars information about normality, and Kolmogorov-Smirnov tests provide inferential statistics on normality. It is recommended that non-normality of data should be corrected (e.g., Churchill, 1995). Normal distribution is often assumed for variables in regression analysis. Variables that are not normally distributed can undermine statistical relationships and significance tests (Hair et al., 2006). In this case transformations (e.g., square root, log, or inverse), can improve normality (Verbeek, 2002; Hair et al., 2006). Analysis of data normality was done in Section 7.8 of Chapter 7 and was concluded that

normality was not a concern. For this reason, the current study did not conduct data transformation.

8.2.1.2 Linearity

Linearity simply suggests that the dependent variable is a linear function of the predictor (independent) variables (Darlington, 1968). According to Osborne and Waters (2002) there is a high probability of non-linear relationships in the social sciences, therefore, it is highly recommended that analysis of linearity is conducted. The literature suggests three ways to detect non-linearity (e.g., Pedhazur, 1997; Cohen and Cohen, 1983; Berry and Feldman, 1985). First, researchers use theory or prior studies to examine linearity. However, it has been argued that many previous studies have failed to examine the possibility of non-linear relationships (Osborne, Christensen and Gunter, 2001). Second, researchers detect non-linearity by examining residual plots. Third, non-linearity is examined by examining curvilinearity (Goldfeld and Quandt, 1976).

Whilst there are many ways to check linearity of the data, this study created scatterplots and partial regression plots. Accordingly, this study examined the linearity of the sample through examination of bivariate scatterplots. An examination of the bivariate scatterplots suggests that the scatterplots were within an acceptable range suggesting that this study did not violate the linearity assumption; hence was no need for data transformation.

8.2.1.3 Homoscedasticity

Homoscedasticity is a situation in which the variance of errors is the same for all levels of the independent variable. This suggests that scholars assume that errors are spread out consistently between the variables (Keith, 2006). That is, where the variance of errors along the line of best

fit is not similar to that of the independent variable, heteroscedasticity is detected. As has been argued by some researchers (e.g., Berry and Feldman, 1985; Tabachnick and Fidell, 1996) heteroscedasticity does not have much effect on significance tests; however, when heteroscedasticity is detected this can affect the finding adversely. The homoscedasticity assumption can be checked by visual inspection of bivariate scatterplots (Berry and Feldman, 1985; Field, 2009). Accordingly, this study analysed the data characteristics through the examination of bivariate scatterplots.

8.2.1.4 Independence of Observations

Independence of observations refers to the assumption that observations are independent of one another, indicating that respondents are responding independently (Stevens, 2009). When data are not drawn independently from the population, this assumption may be violated (Keith, 2006). The assumption of independence was assumed to have been achieved in that the current study adopted questionnaire survey and the respondents answered the questions without any interference by the researcher. Additionally, this study adopted a random sampling technique to draw the sample (Field, 2009). For this reason, the assumption of independence was believed to have been achieved.

8.2.1.5 Multicollinearity

Multicollinearity is a concern in multivariate statistical analysis (Darlington, 1968; Hair et al, 2006). Multicollinearity relates to a situation that the independent variables are highly correlated in a model (Darlington, 1968; Keith, 2006). Thus, multicollinearity is a situation where several independent variables correlate at high levels with one another (Keith, 2006). As indicated by some researchers, the presence of multicollinearity can undermine the credibility of the study's results; hence the need to control for such influence (Darlington, 1968; Ping, 1995; Hair et al.,

412006). To tackle the problem of multicollinearity, the literature suggests several roadmaps (e.g., Cohen, 1968; Lance, 1988; Mason and Perreault Jr., 1991; Keith, 2006; Little et al., 2006; Geldhof, et al., 2013).

To ensure that multicollinearity did not pose a challenge to the present study's results, the current study used the residual centering approach (Little et al., 2006; Geldhof et al., 2013). Residual centering involves eliminating the covariance between two variables, allowing each to retain its unique variability (Lance, 1988; Geldhof, et al., 2013). According to Geldhof, et al., (2013) residual centering rotates Yj in factor space, making it completely orthogonal to all predictors in the regression equation; altering item variances and covariances. Following this argument, all the variables included in the creation of the interaction terms were residually centred (Little et al., 2006; Hair et al., 2006; Geldhof, et al., 2013) by following a two-step procedure utilised by Little et al., (2006). Thus, the present study removed unwanted variability from items or indicators before performing the target analysis.

Prior to embarking on the aggregate main effect hypothesis test, certain diagnostic tests were executed to examine whether multicollinearity was a concern. Indeed, some scholars have argued that collinearity between predictors makes it difficult to assess the individual influence of a predictor (e.g., Myers, 1990; Verbeek, 2002; Field, 2009). The present study checked possible collinearity among variables by examining bivariate correlations and computing variance inflation factors. Thus, first, one way of identifying collinearity is construct a correlation matrix of all the predictor variables and examine if any correlates very high. According to Field (2009) correlations above .80 raises concern of multicollinearity. Inspecting the correlation matrix in Table 8.1 revealed that none of the predictor coefficient was near .80 suggesting that

multicollinearity was not an issue in the regression analysis. Table 8.1 provides the means, standard deviations and bivariate correlations for the study variables.

While the correlation matrix has been suggested to able detect possibility of multicollinearity in multiple regression results, some scholars suggest that this technique misses more subtle forms of multicollinearity (Myers, 1990; Bowerman and O'Connell, 1990; Field, 2009). As such the variance inflation factor (VIF) has been suggested to be a more powerful way of detecting multicollinearity among predictor variables in regression (Myers, 1990). The VIF demonstrates whether a predictor variable has a strong linear relationship with other predictor(s). According to Myers (1990) a VIF value of 10 is a good value at which to raise concern.

Additionally, if the average VIF is equal to 1, multicollinearity is not a problem, but if the VIF is greater than 1, then multicollinearity may be biasing the regression model (Bowerman and O'Connell, 1990). The output in Table 8.2 below shows that the VIF for each predictor variable is far below 3, which indicates some correlation, but not enough to be overly concerned about (Bowerman and O'Connell, 1990). According to Field (2009) if the VIF goes above 10, it can assume that the regression coefficients are poorly estimated due to multicollinearity. In this study, VIFs ranged from 1.044 to 2.081, which are within the acceptable ranges.

Related to the VIF is the tolerance statistic, representing the reciprocal of the VIF (1/VIF). As such, tolerance values below 0.1 shows serious problem of multicollinearity (Field, 2009). Inspecting Table 8.2 indicates that none of the predictor variables produced a tolerance value of below 0.1. This further suggests that multicollinearity was not a concern in the current study. The findings from the collinearity test following the residual centering technique is presented in Table 8.2.

Table 8. 1: Descriptive Statistics and Correlations (Square Roots of AVE in Diagonal)

	Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Firm size	17.44	10.65														
2.	Entrepreneur's age	29.36	11.62	-.01													
3.	Education	2.26	1.13	.09*	.07												
4.	Firm age	16.78	7.75	.10*	-.03	.10*											
5.	Working experience	5.23	2.39	-.01	-.06	-.04	-.24**										
6.	Gender	0.46	0.57	.03	.01	-.06	-.07	.03									
7.	Prior growth	0.09	0.15	-.05	-.02	.11*	.08	-.03	-.09*								
8.	Political ties	3.23	1.06	.08	.00	.08	.06	.10*	.14**	.14**	**(.80)**						
9.	Passion for inventing	3.20	0.95	-.17**	-.19**	.06	.12*	.12*	.13**	.26**	.06	**(.85)**					
10.	Passion for founding	2.93	0.98	-.16**	-.18**	.03	.24**	.16**	.24**	-.18**	.03	.03	**(.83)**				
11.	Passion for developing	3.94	0.86	-.14**	-.13**	.07	.10*	.19**	.14**	.04	.05	.06	.04	**(.79)**			
12.	Environmental dynamism	3.73	0.77	-.18**	-.09*	.09*	-.27**	.03	-.02	.19**	.09*	.07	.05	.06	**(.84)**		
13.	Subjective norms	3.75	.073	-.14**	.-09*	.-07	.-05	.36**	.08*	.01	.04	.14**	.11*	.27**	.04	-	
14.	Business growth	3.38	.93	.11*	.11*	.19**	.18**	.19**	.13**	-.05	.28**	-.31**	.16**	.16**	.27**	.02	**(.81)**

[a]n= 346. For gender, male =0; female=1; All variables unstandardized.
*p<0.5
**p<.0

As can be seen from Table 8.2 below, all the variables involved in the regression models exhibit a low inflation factor which is below the recommended cut-off point of 10.00 (Baum, 2006; Geldhof, et al., 2013). Thus, all the variables can be used to interpret the regression results.

Table 8. 2: Collinearity Statistics

Dependent Variable = Business Growth	Collinearity Statistics	
	Tolerance	VIF
Firm size	.920	1.087
Firm age	.829	1.206
Founder's age	.812	1.232
Gender	.958	1.044
Education	.926	1.080
Working experience	.952	1.050
Prior growth	.952	1.050
Political ties (PT)	.919	1.088
Entrepreneurial Passion (EP)	.908	1.101
Environmental Dynamism (ED)	.781	1.281
EP x PT	.481	2.081
EE x ED	.670	1.492
EP x PT x ED	.602	1.662

Note: The table presents the results of collinearity test. The results indicate that there is no issue of multicollinearity among the variables

8.2.1.6 Endogeneity Issues

Scholars have made calls for management researchers to pay attention to the correct estimation of non-experimental causal models; the major problem being endogeneity (Shaver, 1998; Larcker and Rusticus, 2010; Antonakis et al., 2010). Endogeneity is a situation where the effect of x on y is not interpretable due to inclusion of omitted causes. The OLS model may produce biased estimates of the underlying parameters and deviate from the true value (Antonakis et al., 2010). This could distort hypotheses testing.

To fully address the simultaneity issues and omitted variable bias in respect of passion (and its domains) this study used Cragg-Donald statistic to assess the joint significance of the study's exogenous variables and the instrumental variables (Kleibergen and Paap, 2006). As

instrument for passion (and its domains), this study employs subjective norms, defined as individuals perception of approval by important referent individuals in relation to their involvement in founding and growing a business (Ajzen, 1991).

The use of subjective norm as an instrument is diagnostically acceptable because individuals with high perceived social desire to become entrepreneurs are expected to have high passion (Cardon et al., 2009a), and this perceived social desire (subjective norms) is not expected to have a direct effect on firms' growth. This suggests that subjective norm is a valid instrument for passion.

To show that the study's instrumental variable is relevant, ivreg2 function in Stata 11 was utilised. The findings revealed that the study's Cragg-Donald statistic was 34.212 and higher than the suggested cut-off value of 24.71 (Cragg, and Donald, 1993; Stock and Yogo, 2005). This study tested for exogeneity utilising Wu-Hausman F-test and the Durbin-Wu-Hausman test (Patel, Eddleston and Kellermanns, 2011). The findings of these tests suggest that the independent variables in the current study (founding, inventing, developing and aggregate passion) are exogenous and unbiased. Table 8.3 below presents the results of the Wu-Hausman F-test and the Durbin-Wu-Hausman test. The results from the Table 8.3 were interpreted based on Stock and Yogo's (2005) critical values.

Table 8. 3: Tests for exogeneity

Independent variables	Wu-Hausman *F-test*	*p*-value	Durbin-Wu-Hausman *χ2 test*	*p*-value
Passion for Inventing	.678	.26	.773	.38
Passion for Founding	.618	.49	.523	.48
Passion for Developing	.785	.38	.893	.38
Aggregate passion	.683	.47	.722	.47

Further inspection of the non-significant *F*-tests and non-significant chi-square tests as part of the Durbin-Wu-Hausman test revealed that the independent variables' estimates are not

biased and that the independent variables can be considered exogenous (Stock and Yogo, 2005; Antonakis et al., 2010). Moreover for the domains of passion, there is no significant correlation whatsoever (Table 8.1) and in the case of domains of passion and political ties there is no correlation. The pattern for the domains of passion and environmental dynamism is substantially similar. This suggests that the results are not plagued by endogeneity since the multicollinearity is so low (Antonakis et al., 2010; Baggozi and Yi, 2012).

8.3 OVERALL APPROACH TO REGRESSION ANALYSIS

8.3.1 Overview of the Analysis

Having examined the statistical assumptions underpinning the multiple regression technique used in testing the conceptual models, the hypotheses testing task for the current study was executed out in three steps. The conceptual models proposed by the research in Chapter 5 involved two different conceptual models which hypothesised multiple relationships. These conceptual models were tested through different regression models. The first set of relationships relate to the association between entrepreneurial passion and business growth. Moreover, moderators of this relationship are tested in this model.

The second set examined the relationship between individual entrepreneurial passions and business growth. The third set of relationships relates to the interaction effects of political ties on the relationship between individual entrepreneurial passions and business growth. Fourth set of relationships involved the interaction effects of environmental dynamism on the relationship between individual entrepreneurial passions and business growth. The moderator effect analysis procedures utilised in previous scholarly studies (e.g., Dawson and Richter, 2006; Hmieleski and Baron, 2009; Anderson and Eshima, 2013; De Clercq, Sapienza and Zhou, 2014; Dawson, 2014) were specifically followed in the current study.

The following sections report regression models of the individual analyses and results. Specifically, section 8.3.2 describes the results of the aggregate main effect hypothesis test. Thus, in this section the results of the aggregate effects model are reported. Section 8.3.3 describes the results of moderating effects of political ties and environmental dynamism on the entrepreneurial passion-business growth linkage. Section 8.3.4 reports test for the association of the individual entrepreneurial passions with business growth whiles Section 8.3.5 tests the moderating effects of political ties on the relationship between individual entrepreneurial passions and business growth. Section 8.3.6 specifies the results of the moderating effects of environmental dynamism on the individual passions-business growth linkage. Section 8.4 summarises and concludes Chapter 8.

8.3.2 Results of the Aggregate Main Effect Hypothesis Test

The major objective of this study had been to examine the effect of aggregate passion on small business growth. To achieve this objective, the current study developed and tested a model (aggregate model) that specified an association between overall entrepreneurial passion and business growth. Thus, the initial effort to examine the associations proposed by the aggregate effect model involved using multiple regression analysis. According to Hair et al., (2006) multiple regression analysis can be used to test the association between a single dependent variable and several predictor variables. Following this view, the current study used ordinary least squares (OLS) regression to examine the aggregate main effect model. To achieve this objective, the standardised estimates (β) and the associated t-values of the regression model were examined. Given that the hypothesised relationships in the model were one-directional, the conventional critical t-values of 1.282, 1.645 and 2.325 were used for *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$ respectively. A summary of the hypothesised associations and their corresponding coefficients and associated critical t-values are provided in Table 8.4.

To examine the relationship between aggregate passion and business growth, two models were estimated. The only hypothesised relationship was the one that linked entrepreneurial passion to business growth. The unhypothesised relationships were taken as controls. Model 1 included the control variables while model 2 entered entrepreneurial passion. Thus, in model 1, the study regressed business growth on the control variables while model 2 entered entrepreneurial passion. For each model, the variance inflation factor values of the variables were less 10, suggesting that multicollinearity was not an issue (Aiken and West, 1991).

Table 8. 4: Regression Results of Aggregate Passion and Business Growth

Variables	**Model 1**		**Model 2**	
	β	***t*-value**	***β***	***t*-value**
Firm control variables				
Firm age	.014	.245	.016	.273
Firm size	.134***	2.419	.129***	2.343
Prior growth	-.057	-.1045	-.064	-1.182
Individual control variables				
Founder age	.119**	2.212	.106**	1.993
Gender	.092**	1.700	.028	.470
Education	.118**	2.131	.075*	1.362
Working experience	.130***	2.347	.131***	2.380
Main effect				
H_1: Entrepreneurial Passion			.077*	1.447
Model Fit				
Constant	2.27(1.38)***		2.55(1.66)***	
F-value	1.559***		2.607***	
R^2	.040		.086	
Adjusted R^2	.014		.053	
R^2 Change			.046***	
Sig. F-change			.001	

N=346. Standardised Beta coefficients and t-values are reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

H_1: *Entrepreneurial passion is positively related to business growth.*

The first hypothesis of the study suggested that entrepreneurial passion would be positively related to business growth. The test of this hypothesis while controlling for firm age, size, prior growth, founder age, gender, education and working experience showed that entrepreneurial passion at an aggregate level positively but weakly relates to business growth

(β=.077; $p < .10$). Thus, hypothesis 1 of the study was supported at 10% significance level. The result revealed that high levels of overall entrepreneurial passion would weakly support business growth. Thus, although this study found a weak relationship between entrepreneurial passion and business growth, the result contradicts previous scholarly studies (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004) which found that passion indirectly relates to business growth. The reason may be due to the context and institutional difference of research settings.

The institutional difference hypothesis (IDH) (Julian and Ofori-Dankwa, 2013) suggests that, given the different institutional contexts between extant research settings in developed economies and those in less developed market settings, different responses regarding empirical studies are expected. Thus, while studies undertaken in developed economies (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004) characterised by strong institutional support showed an indirect relationship between passion and venture growth, this study following IDH logic revealed a positive but weak relationship between entrepreneurial passion and business growth in an emerging economy. The reason may be that entrepreneurs in emerging market economies experience several constraints (Robson and Obeng, 2008) suggesting that to be able achieve success, entrepreneurs require passion to deal with the uncertain success of inventing, founding and developing new organisations with limited resources (Cardon et al., 2013). Thus, this study argues that overall level of passion positively relates business growth in an emerging economy context due to high levels of environmental constraints in these contexts making passion an important variable to pursue business dreams.

8.3.3 Moderating Effects of Political Ties and Dynamism

Having examined the direct main effect of entrepreneurial passion on business growth, the study advanced to examine the moderating effects of political ties and environmental

dynamism on the aggregate entrepreneurial passion-business growth association. The moderating effects model in this study was therefore, examined following procedures advocated in previous studies (e.g., Dawson and Richter, 2006; Hmieleski and Baron, 2009; De Clercq, Sapienza and Zhou, 2014). Due to the inclusion of interaction term in the regression estimate, multicollinearity becomes apparent. In the present study, all the variables involved in the creation of the interaction terms were residually centred following procedures advanced by Dawson and Richter (2006).

8.3.3.1 Statistical Procedures

To test the moderator model, Dawson and Richter's (2006) two-step procedure for the estimation of interaction variables was utilised. The first step involved estimating the main effect model. That is, the direction association of entrepreneurial passion, political ties and environmental dynamism with business growth.

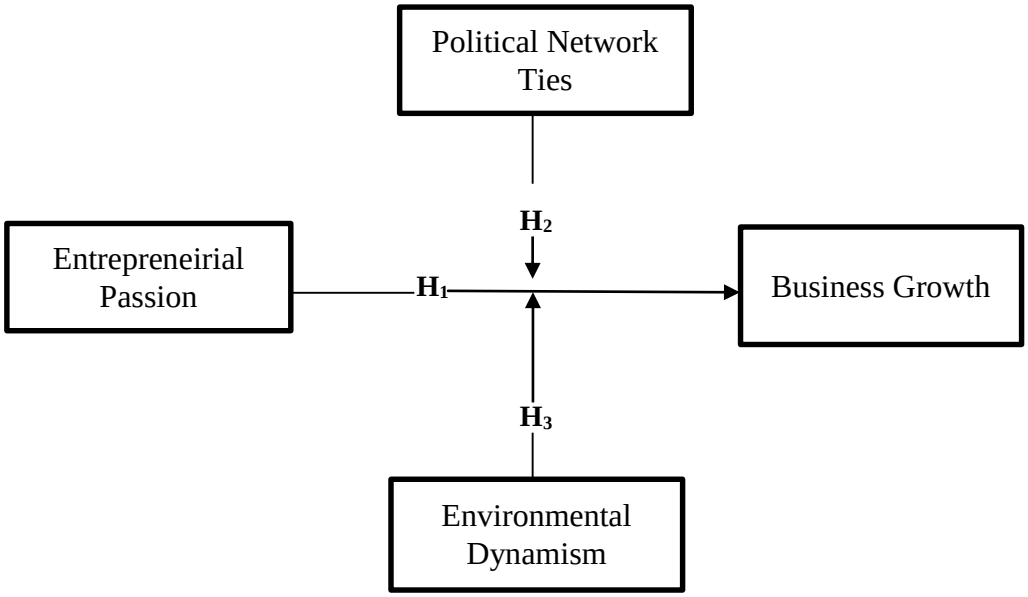

Figure 8. 1: Moderating Effects of Political Ties and Dynamism

As is depicted in Figure 8.1, three equations were modelled for the main effects. Entrepreneurial passion, political ties and environmental dynamism were modelled as direct determinants of business growth. To illustrate how the interaction terms were estimated,

Hmieleski and Baron's (2009) procedure was adopted. In this procedure, Hmieleski and Baron (2009) argued that the relationship between an independent variable (X) and a dependent variable (Y) was moderated by variable (Z). The creation of the interaction term was executed by multiplying X by Z and their product was residually centred. Following this procedure, three interaction terms were created in the current study. The procedure for creating the interaction terms is presented in Table 8.5 below.

Table 8. 5: Operationalisation of the Interaction Terms

Interactive terms	Abbreviations
Entrepreneurial passion x Political ties	EP x PT
Entrepreneurial passion x Environmental dynamism	EP x ED
Entrepreneurial passion x Political ties x environmental dynamism	EP x PT x ED

8.3.3.2 Political Ties, Passion and Business Growth

Results for hypotheses 2 and 3 are shown in Table 8.6 where the two hypotheses are tested in model 3. The model returned good fit for the data (R^2 =.143 and adjusted R^2 =.095) which is higher than R^2 and adjusted R^2 in model 2. Moreover, the F-statistic of model 3 produced excellent fit for the data (F= 3.414) which is higher than that of model 2 (F=2.607). Thus, the results of model 3 were used to test the moderator hypotheses (i.e. H_2 and H_3). Results of the standardised Beta and t-values of the two moderator variables are presented in Table 8.6.

H_2: *The positive relationship between entrepreneurial passion and business growth will be stronger when entrepreneurs' political ties are higher.*

The overall results revealed that political ties interaction term was significantly and positively associated with business growth (β=.198; $p < .01$). Therefore, the findings offer support for hypothesis 2. The graph of this interaction (Figure 8.2) shows that the relationship between entrepreneurial passion and business growth is more positive for those with high, as opposed

to low, political ties. This result reveals that high level of political ties would enable entrepreneurs with passion to better predict business growth. Additionally, the results indicate that high levels of political ties predict business growth in a less developed market economy as suggested in previous scholarly studies (e.g., Li, 2005; Acquaah, 2007). The reason being that political ties positively and significantly relate to business growth in a developing country context (see model 2; β=.159; $p < .01$). The graph in Figure 8.2 below was created using Excel worksheet (available at http://www.jeremydawson.co.uk/slopes.htm) utilised in previous scholarly studies (Dawson and Richter, 2006; Dawson, 2014).

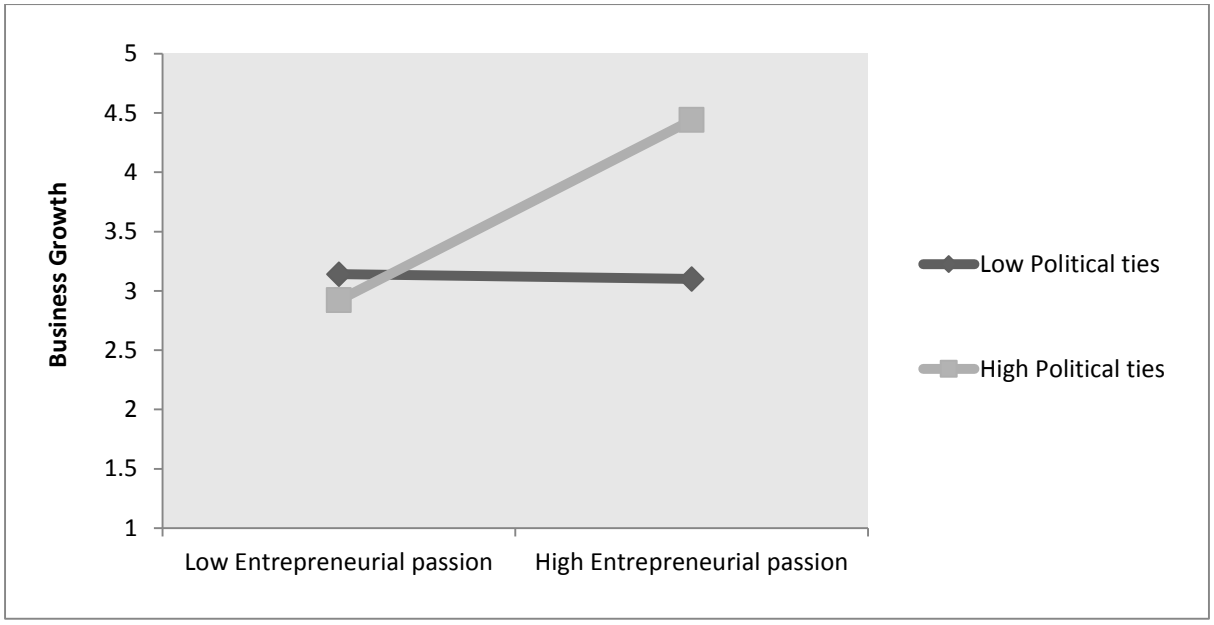

Figure 8. 2: Interaction Effect of Aggregate Passion with Political Ties

Figure 8.2 shows that the possession of higher levels of political ties facilitated stronger growth among more small businesses. Again, linear comparisons indicated that the slopes of the two lines are statistically different, however the relatively flat slope for the political ties suggests that the entrepreneurial passion-business growth relationship does not significantly change in the presence of low levels of political ties.

This result lends credence to the view that firms' political ties enable entrepreneurs with passion to achieve business growth in challenging environments characterised by high constraints. It also lends support for the argument that entrepreneurial political networking relationships developed with external entities on a firm's activities enable them to acquire resources and opportunities for firms (Acquaah, 2007). For example, in a less developed market economy such as Ghana, governments and bureaucratic official play an important role in regulating business activities and providing resources and opportunities for firms. Entrepreneurs, therefore, rely heavily on governments for favourable regulations (Acquaah and Eshun, 2010). This study argues that these resources moderate the effect of passion on business growth in less developed market settings such as Ghana.

Table 8. 6: OLS Models for Political Ties, Dynamism, Aggregate Passion and Growth

Independent Variables	Model 1		Model 2		Model 3		Model 4	
	β	***t*-value**	***β***	***t*-value**	***β***	***t*-value**	***β***	***t*-value**
Firm control variables								
Firm age	.014	.245	.016	.273	.017	.297	.018	.307
Firm size	.134***	2.419	.127***	2.343	.129***	2.419	.105**	1.907
Prior growth	-.057	-.1045	-.064	-1.182	-.042	.0788	-.065*	-1.542
Individual control variables								
Entrepreneur's age	.119**	2.212	.106**	1.993	.082*	1.559	.183***	3.442
Gender	.092**	1.700	.028	.470	.018	.311	.043	1.147
Education	.118**	2.131	.075*	1.362	.078*	1.467	.065*	1.542
Working experience	.130***	2.347	.131***	2.380	.140***	2.597	.198***	2.774
Main effects								
H_1: Entrepreneurial Passion (EP)			.077*	1.447	.079*	1.484	.084*	1.768
Environment Dynamism (ED)			.137***	2.567	.136***	2.584	.189***	1.882
Political Ties (PT)			.159***	2.867	.141***	2.566	.171***	2.126
Two-way interactions								
H_2: EP x PT					.198***	3.721	.200***	3.765
H_3: EP x ED					.192***	3.598	.183***	3.431
PT x ED					.189***	3.543	.186***	3.486
Three-way interactions								
EP x PT x ED							.188***	3.542
Model Fit								
Constant	2.27(1.38)***		2.55(1.66)***		3.30(1.90)***		4.83(2.79)***	
F-value	1.559***		2.607***		3.414***		4.341***	
R^2	.040		.086		.143		.183	
Adjusted R^2	.014		.053		.095		.101	
R^2 Change			.046***		.048***		.049***	
Sig. F-change			.001		.000		.000	

N=346. Standardised Beta coefficients and t-values are reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

8.3.3.3: Dynamism, Passion and Business Growth

Having examined the moderating role of political ties on entrepreneurial passion-business growth linkage, the study proceeded to examine the moderating effects of environmental dynamism on the relationship between entrepreneurial passion and business growth.

H_3: *The positive relationship between entrepreneurial passion and business growth will be stronger when environmental dynamism is higher.*

Hypothesis 3 argued that the positive association between entrepreneurial passion and business growth is stronger when environmental dynamism is high. The results of this hypothesis revealed that environmental dynamism interaction term was significantly and positively associated with business growth (β=.192; $p < .01$). The graph of this interaction (Figure 8.3) shows that the relationship between overall entrepreneurial passion and business is more positive for those leading their firms in dynamic environments as opposed to stable, industry environments. As Figure 8.3 shows, environments characterised by higher levels of dynamism are able to generate higher levels of growth in conjunction with entrepreneurial passion than low levels of environmental dynamism. Further, linear comparisons of the slopes of the two conditions suggest that the two slopes are statistically different, however, the relatively flat slope of the low level of environmental dynamism suggests that the relationship between entrepreneurial passion and business growth does not materially change among firms that operate in less dynamic environments as the level of entrepreneurial passion increases. Hence, H_3 was supported in this study. This result shows that a greater level of environmental dynamism would enable entrepreneurs with passion to better predict business growth. Moreover, environmental dynamism is shown in Model 2 to be positively and significantly related to business growth (β=.137; $p < .01$). This suggests that entrepreneurs

who experience high levels of passion require high levels of change and diversity in the environment to in order to produce business growth.

This finding lends support to previous scholarly developments (e.g., Covin and Slevin, 1989; Miller and Friesen, 1982a, 1982b) which argued that active and dynamic environments can enhance entrepreneurial action to spur higher firm performance. Therefore, the more dynamic and competitive the environment, the higher the need for innovation and, more likely that small firms will be innovative (Meyers and Marquis, 1969). In line with the view that environmental dynamism spurs the growth of entrepreneurial opportunities, this study's finding indicates that environmental dynamism positively moderates the positive relationship between entrepreneurial passion and business growth.

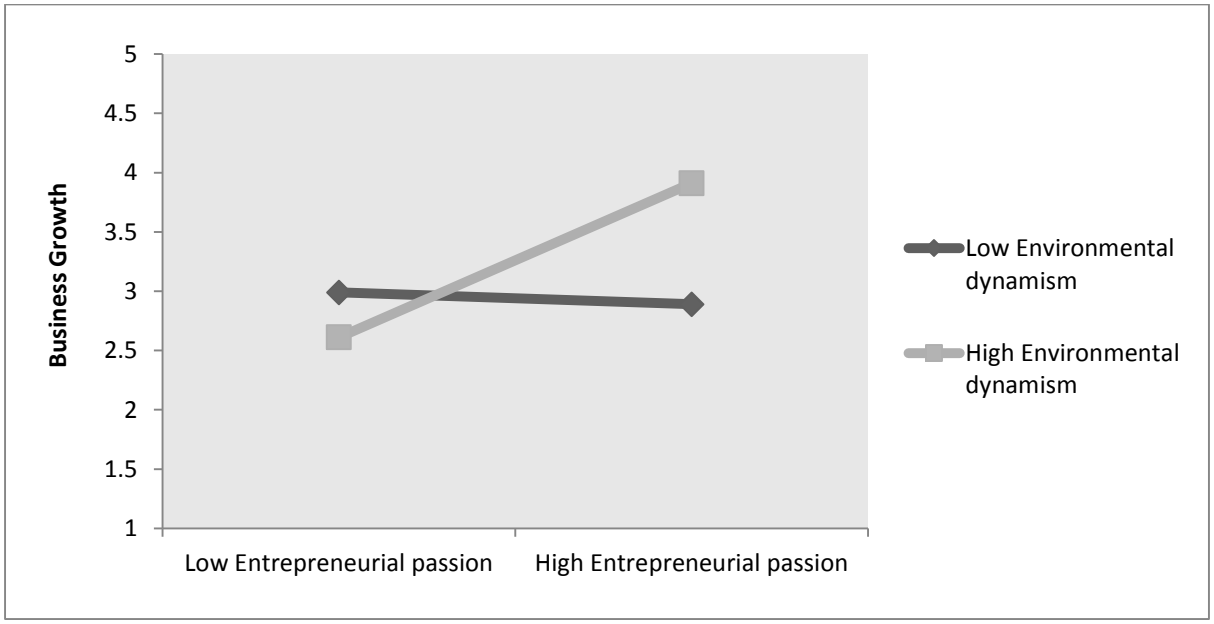

Figure 8. 3: Interaction Effect of Aggregate Passion with Dynamism

In addition to influencing the relationship between passion and business growth individually, the contingency theory suggests that to be able to fully understand complex organisational processes, it is important to examine variables operating at different levels of analysis such as environmental and firm level variables (e.g., Burns and Stalker, 1961; Ginsberg and

Venkatraman, 1985). This study argued that environmental dynamism and firms' political connections with regulatory and government officials in growing their firms may exert joint effects on this relationship. Put differently, these environment dynamism and political ties act as moderators concurrently-reciprocally enhancing the influence of entrepreneurs' passion on small business growth. Therefore, in post hoc analysis, this study explored the three way interaction of passion, political ties and environmental dynamism on business growth. As shown in model 4 of Table 8.6, the three way interaction is found to be significant and positive for business growth (β=.188; $p < .01$). The graph of this interaction (Figure 8.4) indicates that the relationship between entrepreneurs' passion and growth of their firms is most positive when political ties and environmental dynamism are both high. Thus, as contingency theory suggests, these moderating variables appear to operate jointly in influencing business growth.

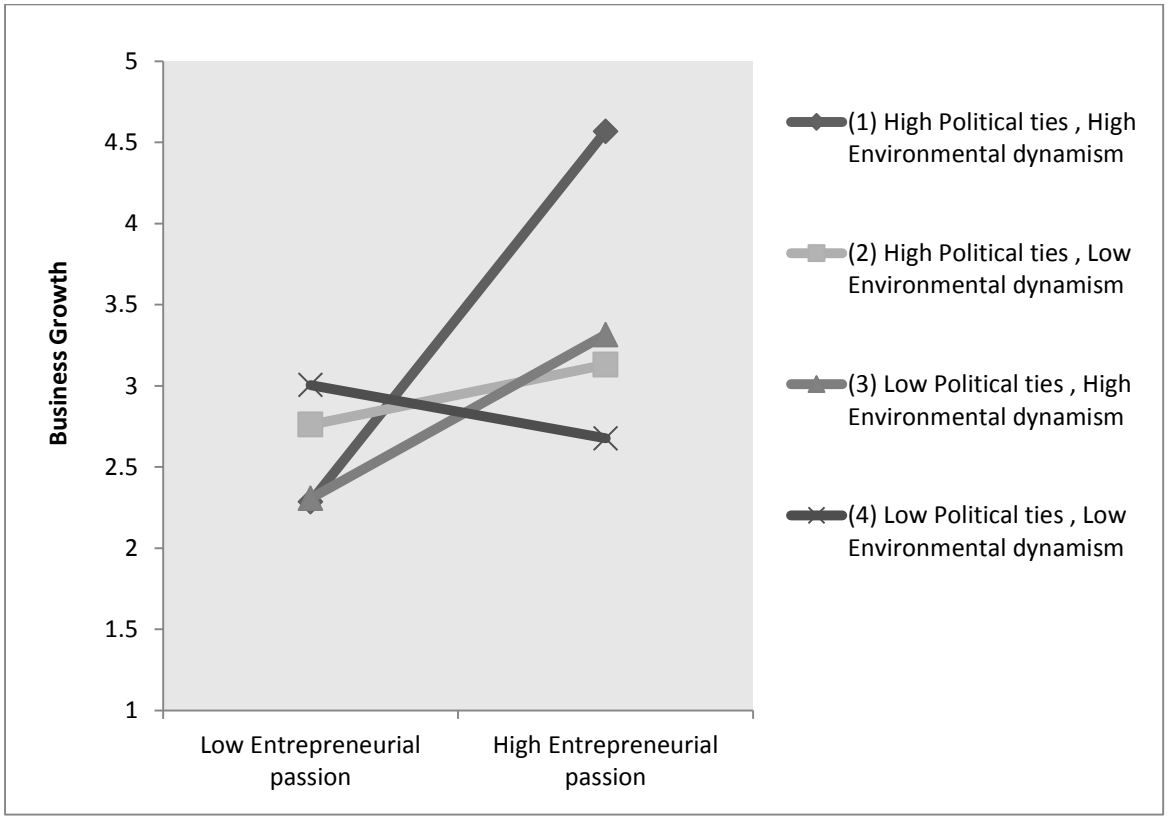

Figure 8. 4: Interactions of Passion with Political Ties and Dynamism

Table 8.7 below displays a summary of the standardised parameter estimates and significant level of the hypotheses tested.

Table 8. 7: Summary of Standardised Parameter Estimates and Significance Levels

	Relationship	Standardised parameters	t-values	Comment
H_1	Entrepreneurial Passion (EP)	.077*	1.447	Weakly Supported
H_2	EP x PT	.198***	3.721	Supported
H_3	EP x ED	.192***	3.598	Supported

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

8.3.4 Individual Entrepreneurial Passions and Business Growth

Having examined the direct association between aggregate passion and business growth and the moderating effects of political ties and environmental dynamism on this association, this study proceeded to examine the effects of individual domains of entrepreneurial passion on business growth. As has been stressed in previous chapters, examining the entrepreneurial passion construct from disaggregate perspective enables scholars to observe individual effects of entrepreneurial passion's domains on significant dependent variables. As such, a major ramification of the disaggregate perspective is that it gives scholars some insights to achieve greater parsimony and be able to look at a bigger picture about entrepreneurial passion's contribution to business growth. Table 8.8 accounts for the direct association of domains of passion with business growth. In this situation, the independent variables were passion for founding, passion for inventing and passion for developing and the dependent variable was business growth.

8.3.4.1 Results of the Individual Passions Hypothesis Test

This study tested three hypotheses that correspond to the direct association of the proposed entrepreneurial passion domains with business growth. Each domain of passion was

therefore, hypothesised to influence business growth. Results of the analysis are presented in Table 8.8 and are discussed in the sections that follow next.

Table 8. 8: OLS Models for Individual Passion Domains and Business Growth

Variables	**Model 1**		**Model 2**	
	β	***t*-value**	***β***	***t*-value**
Firm control variables				
Firm age	.014	.245	.013	.240
Firm size	.134***	2.419	.082*	1.514
Prior growth	-.057	-.1045	-.019	-.332
Individual control variables				
Founder age	.119**	2.212	.105**	1.992
Gender	.092**	1.700	.086*	1.607
Education	.118**	2.131	.121**	2.185
Working experience	.130***	2.347	.132***	2.501
Main effects variables				
H_4:Passion for Founding (PFF)			.161***	2.971
H_5: Passion for Inventing (PFI)			-.080*	-1.494
H_6: Passion for Developing (PFD)			.175***	3.155
Model Fit				
Constant	2.39(1.49) ***		2.68(1.67)***	
F-value	1.559***		2.710***	
R^2	.040		.075	
Adjusted R^2	.014		.047	
R^2 Change			.035***	
Sig. F-change			.004	

N=346. Standardised Beta coefficients and t-values are reported. *** p < 0.01, ** p < 0.05, * p <0.10. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

H_4: *Passion for founding is positively related to business growth.*

Hypotheses 4 argued that a positive relationship exists between passion for founding and business growth. The relationship was strongly supported (β=.161, p < .01). This result suggests that individuals' passion for founding new ventures ensures increased business growth. This result is consistent with recent scholarly work which suggests that entrepreneurs' passion to put together the necessary financial, human and social resources required to create a new business is likely enhance business success (Cardon et al., 2009a; Cardon et al., 2013). This suggests that entrepreneurs who experience high levels of passion

for founding are likely to be more successful than their counterparts experiencing low levels of passion for founding new businesses.

H_5: *Passion for inventing is positively related to business growth.*

It was argued in hypothesis 5 that positive relationship exists between passion for inventing and business growth. This hypothesis was not supported (β=-.080, $p < 0.10$). Contrary to expectation, passion for inventing was negatively related to business growth. This result suggests that experiencing high levels of passion for inventing might work against business success. Thus, contrary to Cardon et al's., (2013) suggestion that passion for inventing are likely to enhance entrepreneurial activities and therefore entrepreneurial success, this study finds that passion for inventing might influence business growth negatively.

H_6: *Passion for developing is positively related to business growth.*

Finally, hypothesis 6 argued that a positive relationship exists between passion for developing and business growth. As expected, this hypothesis was supported by the results (β=.175, $p < 0.01$). This suggests that passion for developing spurs superior business growth in small firms relative to their counterparts experiencing low levels of passion for developing. This result lends support to what has been advanced in the literature (Cliff, 2008; Cardon et al., 2013). For example, as argued by Cardon et al., (2013), entrepreneurs who experience high passion for developing enjoy activities such as growth in sales, hiring new employees, or finding external equity to fund their businesses making them enhance their entrepreneurial activities. Table 8.9 below displays a summary of the standardised parameter estimates and significant level of the hypotheses tested.

Table 8. 9: Summary of Standardised Parameter Estimates and Significance Levels

	Relationship	Standardised parameters	t-values	Comment
H_4	Passion for Founding	.161***	2.971	Supported
H_5	Passion for Inventing	-.080*	-1.492	Not supported
H_6	Passion for Developing	.175***	3.155	Supported

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

8.3.5 Political Ties, Individual Passions and Business Growth

8.3.5.1 Statistical Approach

Having tested the hypotheses regarding the aggregate main effect model (i.e. the association between overall entrepreneurial passion and the moderating effects of political ties and environmental dynamism) and hypotheses relating to individual entrepreneurial passion domains and business growth, the present study proceeded to examine the moderating role of political ties on the association between individual passions and business growth. A major insight is to argue that the effects of the individual entrepreneurial passion domains on business growth might become stronger and more positive when political ties increases within the firms.

To test the moderating hypotheses on this association, several interaction terms were created. In this study, the overall political ties score was multiplied by the individual entrepreneurial passion domains score. As has been indicated earlier, the creation of interaction terms makes multicollinearity apparent. To make sure that multicollinearity was not a concern in the interpretation of the regression results, the resulting product terms were residually-centred (Little et al., 2006; Geldhof et al., 2013). The scores of the residual centering were then used in analysing the moderator relationships.

8.3.5.2 Results of the Political Ties Moderator Hypothesis Test

The presented study stated three moderator hypotheses regarding political ties and individual entrepreneurial passion domains. For this reason, this study tested three moderator hypotheses that correspond to the moderating role of the proposed individual entrepreneurial passion domains with business growth. The results of the political ties moderator effect hypothesis test are presented in Table 8.10. Results of the analysis displayed in Table 8.9 are discussed in the sections that follow next.

Table 8. 10: OLS Models for Political Ties, Individual Passion Domains and Business Growth

Variables	Model 1		Model 2		Model 3		Model 4	
	β	***t*-value**	***β***	***t*-value**	***β***	***t-value***	***β***	***t-value***
Firm control variables								
Firm age	.014	.245	.013	.240	.010	.182	.022	.395
Firm size	.134***	2.419	.082*	1.514	.094**	1.739	.152***	2.899
Prior growth	-.057	-.1045	-.019	-.332	-.017	-.314	-.015	-.282
Individual control variables								
Founder age	.119**	2.212	.105**	1.992	.112**	2.126	.094*	1.848
Gender	.092**	1.700	.086*	1.607	.070*	1.301	.107**	2.101
Education	.118**	2.131	.121**	2.185	.108**	2.111	.104**	2.010
Working experience	.130***	2.347	.132***	2.501	.087*	1.610	.083*	1.604
Main effects variables								
Passion for Inventing (PFI)			-.080*	-1.494	-.078*	-1.443	-.102**	-1.942
Passion for Founding (PFF)			.161***	2.971	.148***	2.651	.131***	2.495
Passion for Developing (PFD)			.175***	3.155	.138***	2.458	.114**	2.186
Political ties (PT)					.148***	2.650	.201***	3.677
Two-way Interactions								
H_7: PFI x PT							.152***	2.894
H_8: PFF x PT							.174***	3.237
H_9: PFD x PT							.204***	3.796
Model Fit								
Constant	2.39(1.49) ***		2.68(1.67)***		3.90(2.43)***		4.81(2.99)***	
F-value	1.559***		2.710***		3.027***		4.537***	
R^2	.040		.075		.098		.171	
Adjusted R^2	.014		.047		.066		.133	
R^2 Change			.035***		.023***		.073***	
Sig. F-change			.004		.000		.000	

N=346. Standardised Beta coefficients and t-values are reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

H_7: *The positive relationship between passion for inventing and business growth will be stronger when entrepreneurs' poltical ties are higher.*

Hypothesis 7 argued that the effect of passion for inventing on business growth would be enhanced if entrepreneurs' political ties level increases. Results of the hypothesis analysis showed that there was a positive significant relationship between passion for inventing interaction variable and business growth (β=.152, p <.01). The graph of this interaction (Figure 8.5) indicates that the relationship between passion for inventing and business growth is more positive for those with high, as opposed to low, political ties. Figure 8.5 demonstrates that the possession of higher levels of poltical ties enhances stronger growth among more small businesses. Again, linear comparisons demonstrated that the slopes of the two lines are statistically different, however the downward slope for low political ties suggests that the relationship between passion for inventing and business growth does materially change in the presence of low levels of poltical ties. Therefore, the findings offer support for hypothesis 7. As such this study argued that political ties did positively moderate the relationship between passion for inventing and business growth.

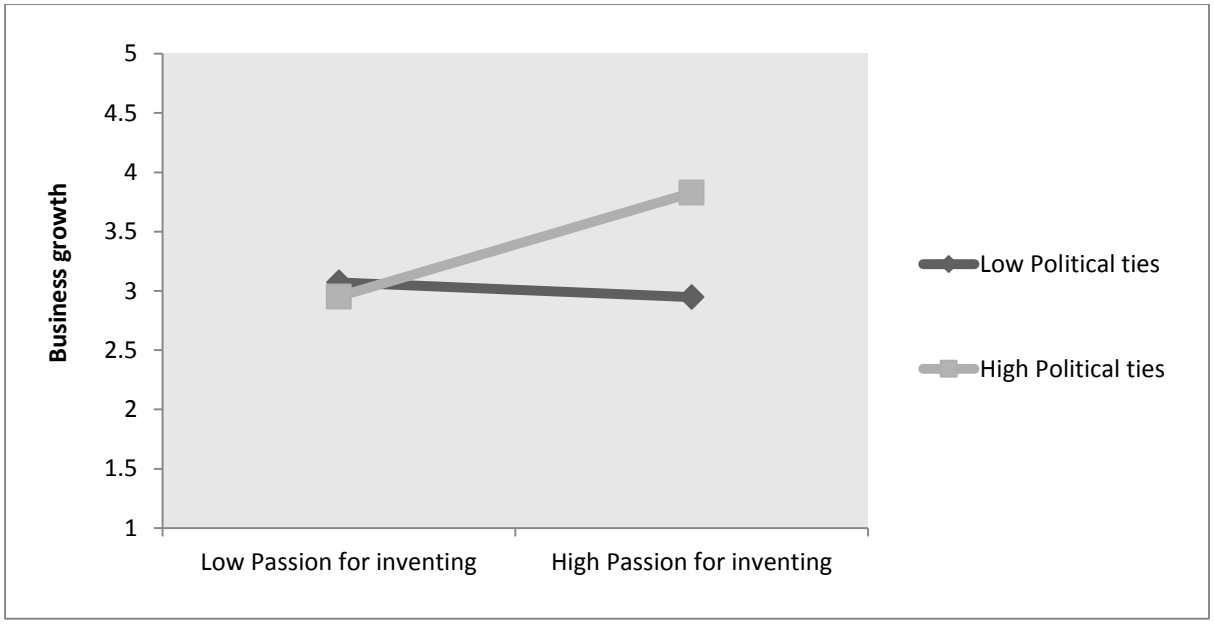

Figure 8. 5: Interaction Effect of Passion for Inventing with Political Ties

This suggests that entrepreneurs require political networking in less developed market economies to ensure that regular activities associated with scanning the environment for new market opportunities, developing new products or services and working with new prototypes (Cardon et al., 2009a) generate the require business growth outcome. As argued by Cardon et al., (2013), individuals experiencing passion for inventing actively seek out new opportunities and enjoy coming up with new products and services. Thus, entrepreneurs who desire to deliver new solutions to important needs and problems in the marketplace without political networking might not produce the positive business growth outcome.

Moreover, introducing new products regularly without having ties with politicians and government officials might not produce the needed business success as politician and government officials still have considerable power and control over the allocation of resources in developing country contexts (Acquaah, 2007; Acquaah and Eshun, 2010). Accordingly, this study argued that developing extensive personal and social networking relationships with politicians and bureaucratic officials tend to make the negative relationship

between passion for inventing and business growth positive and significant in less developed market contexts.

H_8: *The positive relationship between passion for founding and business growth will be stronger when entrepreneurs' political ties are higher.*

It was postulated in hypothesis 8 that the higher the level of political ties the, stronger the relationship between passion for founding and business growth. Thus, the positive association between passion for founding and business growth would be enhanced with high levels of political ties. This study received support for this hypothesis (β=.174, $p <$. 01). The graph of this interaction (Figure 8.6) shows that the association between passion for founding and business growth is more positive for those with high as opposed to low political ties. This suggests that political ties moderate the association between passion for founding and business growth. This suggests that experiencing high levels of passion for founding require high levels of political ties or networking to ensure that the activities associated with assembling necessary financial, human and social resources needed to create a new venture (Cardon et al., 2009a) generate the required business growth outcome.

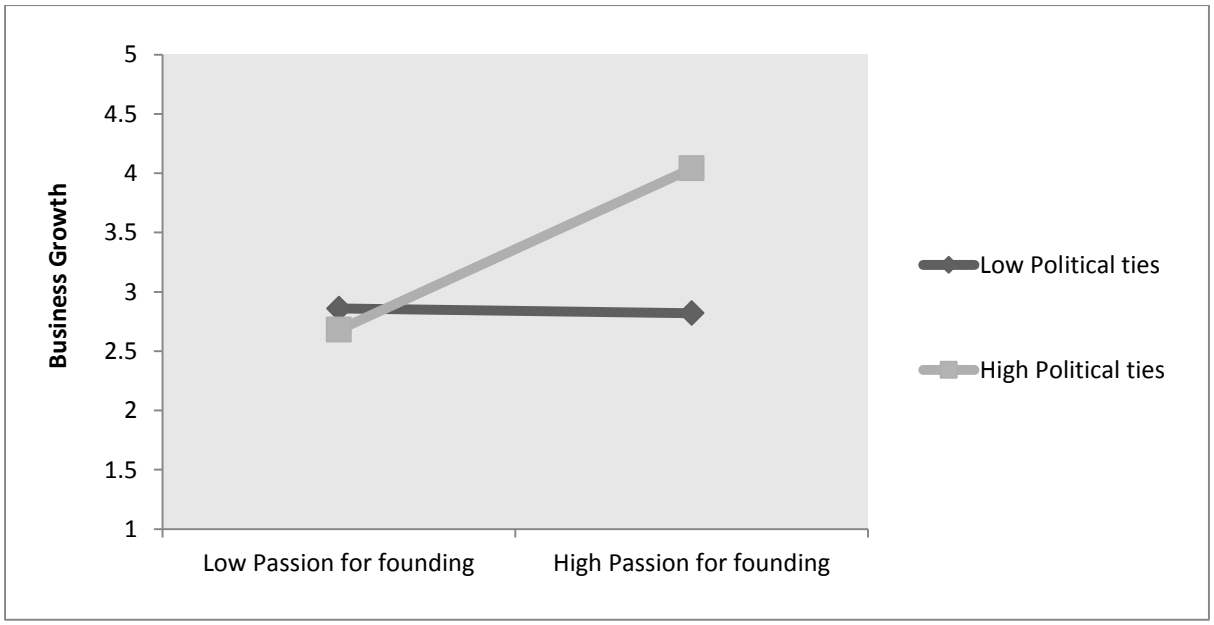

Figure 8. 6: Interaction Effect of Passion for Founding with Political Ties

The desire to found a business is an important motivator for many entrepreneurs (Aldrich and Zimmer, 1986; Cardon et al., 2013) and this study found support for this notion. The study found that experiencing greater levels of passion for founding are likely to spur high growth outcomes when their political connections are stronger. In a developing country context, politicians and government officials have power and control over the allocation of resources (Adjibolosoo, 1995; Li et al., 2008). Therefore, experiencing high levels of passion for founding are likely to enhance growth outcomes of their businesses when entrepreneurs' network ties with politicians and government officials are stronger.

H_9: *The positive relationship between passion for developing and business growth will be stronger when entrepreneurs' political ties are higher.*

In hypothesis 9, this study postulated that the business growth consequence of passion for developing depends largely on political ties formed by entrepreneurs. This study received support for this hypothesis (β=.204, $p < .01$). The graph of the interaction (Figure 8.7) shows that the relationship between passion for developing and business growth is more positive for those with high, as opposed to low, political ties. Thus, results of the hypothesis analysis showed that there is a significant positive relationship between the political ties interaction variable and business growth. This suggests that political ties are ideal for businesses to enhance growth in that political ties moderate the association between passion for developing and business growth.

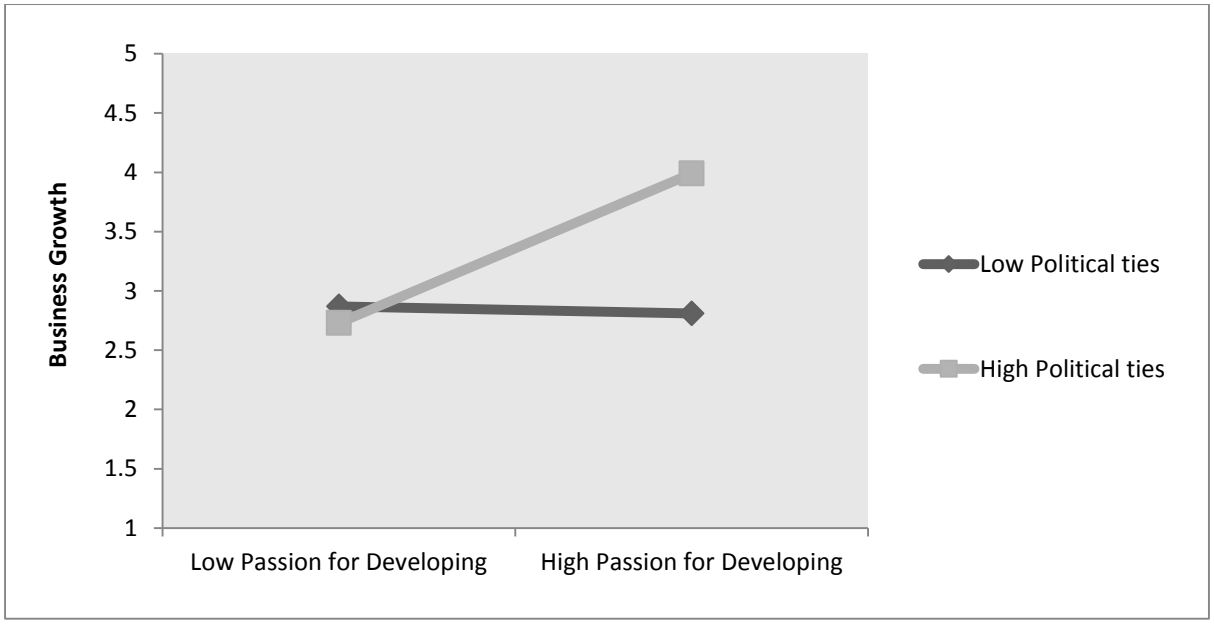

Figure 8. 7: Interaction Effect of Passion for Developing with Political Ties

Thus, experiencing greater levels passion for developing and exhibit different strategies for organisational management (Gundry and Welch, 2001) require greater levels of political networking to enhance superior growth for their businesses. This finding seems to reinforce Acquaah and Eshun's (2010) contention that it is not *what* entrepreneurs know alone that affect a firm's performance, but also *who* entrepreneurs know play a critical role in firm performance. This study, therefore, argues that the effects of entrepreneurs' political networking relationships developed with government and bureaucratic government official enhance the association between passion for developing and business growth in a developing country context. Table 8.11 below displays a summary of the standardised parameter estimates and significant level of the hypotheses tested.

Table 8. 11: Summary of Standardised Parameter Estimates and Significance Levels

	Relationship	Standardised parameters	t-values	Comment
H_7	PFI x PT	.152***	2.834	Supported
H_8	PFF x PT	.174***	3.237	Supported
H_9	PFD x PT	.204***	3.796	Supported

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

8.3.6 Dynamism, Individual Passions and Business Growth

Another aim of the aims of this study is the examination of environmental dynamism as a moderator variable on the relationship between individual passion domains and business growth. The insight is that the impact of individual passion domains on business growth might vary across different degrees of environmental dynamism. To achieve this aim, several interaction terms were created. Thus, the analysis began with the creation of multiplicative terms by multiplying the overall environmental dynamism score by the individual entrepreneurial passion scores.

When interactions terms are created, multicollinearity becomes apparent. To make sure that multicollinearity was not an issue in the interpretation of the regression results, the resulting product terms were residually-centred (Little et al., 2006; Geldhof et al., 2013). The scores of the residual centering were then used to in analysing the moderator relationships. Table 8.12 below presents a restatement of the research hypotheses (i.e. H_{10} to H_{12}) as was earlier presented in Figure 5.1 in Chapter 5. To test the hypotheses (i.e. H_{10} to H_{12}), the procedure outline in Section 8.3.5.1 and the associated logic in the disaggregate effect model presented in Chapter 5 were followed. Table 8.11 below presents the results of the environmental dynamism moderating effect on the association between specific entrepreneurial passions and business growth test.

Table 8. 12: OLS Models for Environmental Dynamism, Passion Domains and Business Growth

Variables	Model 1		Model 2		Model 3		Model 4	
	β	***t*-value**	***β***	***t*-value**	***β***	***t-value***	***β***	***t-value***
Firm control variables								
Firm age	.014	.245	.013	.240	.015	.270	.068*	1.335
Firm size	.134***	2.419	.080*	1.494	.082*	1.540	.075*	1.472
Prior growth	-.057	-.1045	-.019	-.332	-.033	-.590	-.053	1.040
Individual control variables								
Founder age	.119**	2.212	.105**	1.992	.095**	1.799	.062	1.217
Gender	.092**	1.700	.086**	1.607	.089**	1.681	.058	1.139
Education	.118**	2.131	.121**	2.185	.117**	2.211	.118**	2.312
Working experience	.130***	2.347	.132***	2.501	.123***	2.321	.112**	2.116
Main effects variables								
Passion for Inventing (PFI)			-.080*	-1.494	-.124**	-2.217	-.070*	-1.353
Passion for Founding (PFF)			.161***	2.971	.155***	2.883	.122***	2.359
Passion for Developing (PFD)			.175***	3.155	.076*	1.433	.071*	1.372
Environmental Dynamism					.131***	2.458	.194***	3.722
Two-way Interactions								
H_{10}: PFI x ED							.137***	2.616
H_{11}: PFF x ED							.187***	3.611
H_{12}: PFD x ED							.204***	3.904
Model Fit								
Constant	2.39(1.49)***		2.68(1.67)***		3.31(1.91)***		4.22(2.44)***	
F-value	1.559***		2.710***		3.050***		4.227***	
R^2	.040		.075		.095		.114	
Adjusted R^2	.014		.047		.061		.077	
R^2 Change			.035***		.016**		.023***	
Sig. F-change			.004		.001		.000	

N=346. Standardised Beta coefficients and t-values are reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional.

H_{10}: *The positive association between passion for inventing and business growth will be stronger when environmental dynamism is higher.*

The study argued in H_{10} that passion for inventing would be beneficial to small businesses in highly dynamic environments than in much less dynamic environments. This study received support for this hypothesis (β=.137, $p < .01$). The graph of this interaction (Figure 8.8) showed that the relationship between passion for inventing and business growth is positive for those leading their businesses in dynamic, as opposed to stable, industry environments. Thus, results of the hypothesis analysis showed that there is a significant positive relationship between the environmental dynamism interaction variable and business growth. Figure 8.8 shows that small firms operating in dynamic environments are able to generate higher levels of growth in conjunction with passion for inventing than firms operating in static industry environments. Additionally, linear comparisons of the slopes of the two conditions suggest that the two slopes are statistically different, however, the downward slope of low environmental dynamism indicates that the relationship between passion for inventing and business growth significantly changes among firms that operate in less dynamic environments as the level of passion for inventing increases.

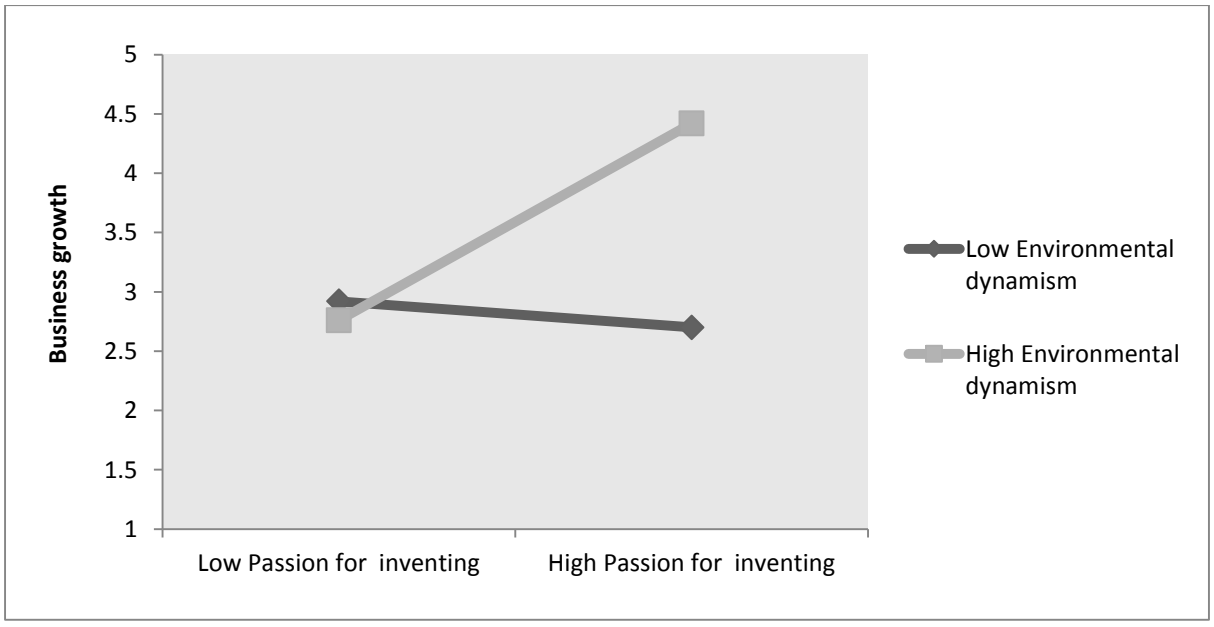

Figure 8. 8: Interaction Effect of Passion for Inventing with Dynamism

Hence, it was concluded that experiencing passion for inventing in more dynamic environments could be beneficial to small businesses. This suggests that owner-managers probably need higher levels of passion for inventing where the environments are continually changing and highly diverse. This is because environmental dynamism enhances the growth of entrepreneurial activities (Fini et al., 2012) and this ensures that firms respond to challenges in the environment.

H_{11}: *The positive association between passion for founding and business growth is stronger when environmental dynamism is higher.*

In hypothesis H_{11}, this study argued that business growth consequences of passion for founding depend on the level of dynamism in the environment. Thus, regarding the impact of this moderator variable on passion for founding-business growth linkage, the study received support for this hypothesis (β=.187, $p < .01$). The graph of this interaction (Figure 8.9) showed that the relationship between passion for founding and business growth is more positive for those leading their firms in dynamic, as opposed to stable, industry environments.

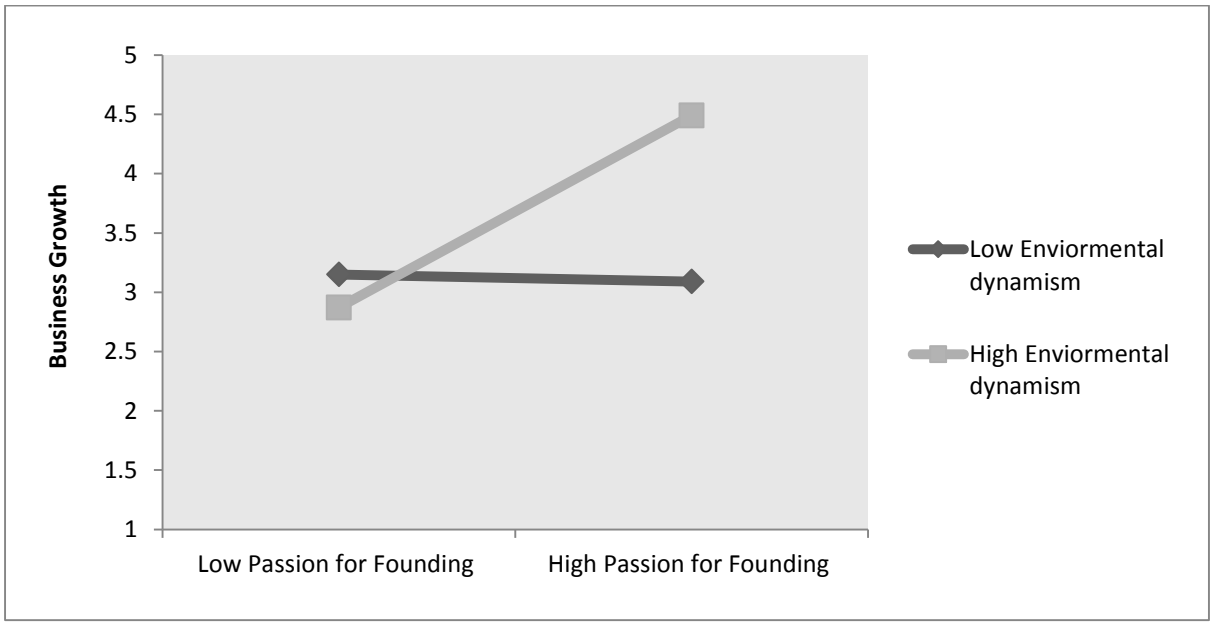

Figure 8. 9: Interaction Effect of Passion for Founding with Dynamism

This suggests that dynamic environments are conducive for entrepreneurs experiencing greater levels of passion for founding to enhance growth of their firms. This is because dynamic environments generate unexploited opportunities for passionate entrepreneurs to explore. Indeed, entrepreneurs who experience passion for founding display positive affect during activities related to the creation of new a firm (Breugst et al., 2012). Simerley and Li (2000: 39) argued that as dynamic environments ‘‘reduces stability and predictability of relations among firms and their constituents within an industry’’ entrepreneurs operating within these environments are required to develop creative and innovative strategies to avert this constraint in the environment (D’Aveni, 1994). Developing these innovative strategies might serves as a source of motivation for entrepreneurs operating in dynamic environments.

H_{12}: *The positive association between passion for developing and business growth wil be stronger when environmental dynamism is higher.*

Hypothesis 12 argued that environmental dynamism moderates the association between passion for developing and business growth. The study did find support for this hypothesis (β=.204, $p < .01$). The graph of this interaction (Figure 8.10) shows that the relationship between passion for developing and business growth is more positive for those leading their firms in dynamic, as opposed to stable, industry environments. That is, the positive linkage between passion for developing and business growth is positively moderated by high levels of environmental dynamism.

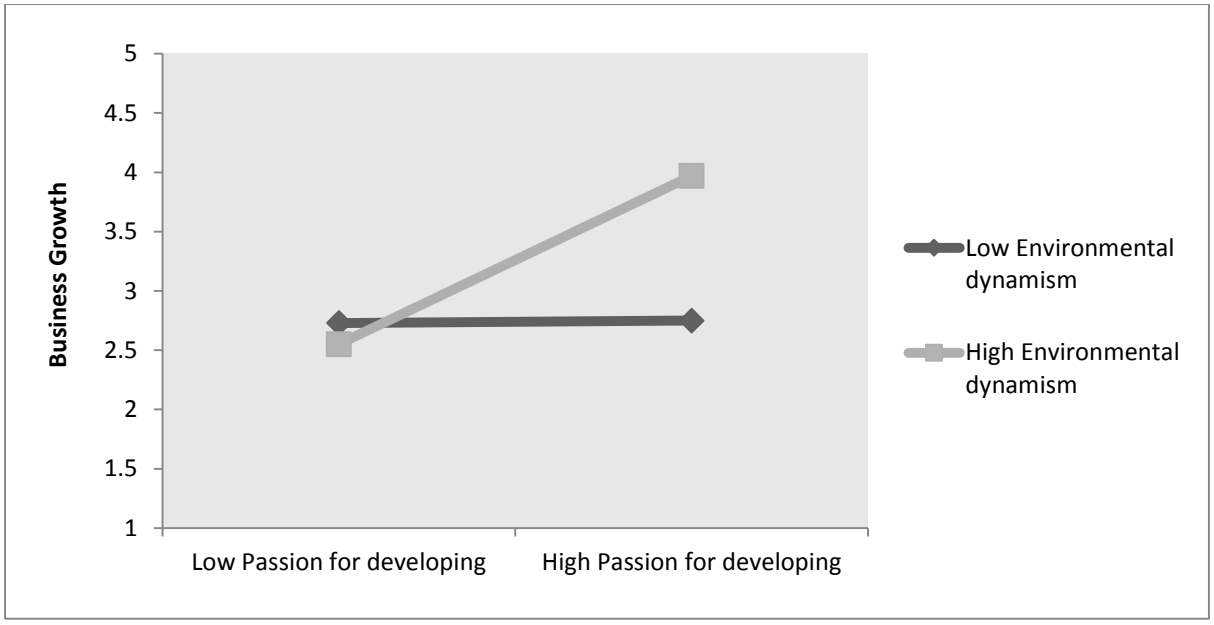

Figure 8. 10: Interaction Effect of Passion for Developing with Dynamism

This result indicates that entrepreneurs who experience greater degrees of passion for developing are likely to enhance growth of their businesses in dynamic environments. This suggests that dynamic environments are ideal for businesses whose owners experience high levels of passion for developing. As passion for developing is associated with growth and expansion of businesses (Cardon et al., 2009a), entrepreneurs who experience high levels of passion for developing are likely to pursue strategies aimed at growth and expansion of their business when environmental dynamism is high and this can translate into higher growth. Table 8.13 below displays a summary of the standardised parameter estimates and significant level of the hypotheses tested.

Table 8. 13: Summary of Standardised Parameter Estimates and Significance Levels

	Relationship	Standardised parameters	t-values	Comment
H_{10}	PFI x ED	.137***	2.616	Supported
H_{11}	PFF x ED	.187***	3.611	Supported
H_{12}	PFD x ED	.204***	3.904	Supported

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional).

8.4 ADDITIONAL CHECKS

Whiles the subjective growth measures used in the current study helped to avoid problems such as non-standardised financial reporting, and inflation or devaluation of local currency associated with objective growth measures in emerging economies (Hoskinsson et al., 2000), other studies have contended that business growth entails a longitudinal element (Coad, 2007; Coad and Rao, 2008; Davidsson, 1989a; Davidsson, and Delmar, 1997; Davidsson, Steffens, and Fitzsimmons, 2009). This study tried to obtain from respondents the firms' employment growth in the last three years. As has been stated (Chapter 6), it is very difficult to obtain objective data in developing economies due to widespread tax evasion in such economies (Hoskisson et al., 2000; Malik and Kotabe, 2009). Similarly, Cressy (2006) observed that small businesses are notorious for hiding objective data from the tax authorities for income. As such, only 68 respondents were willing to provide three years' employment figures.

To evaluate the validity of the study's findings, additional test was conducted using the employment as growth measure (see Table 8.14). The growth rate of the 68 businesses that provided employment data was measured based on the number of employees from the period 2011 to 2013. In estimating an annualised rate of growth for these firms in the model, this study followed previous studies (e.g., Brouwer et al., 1993; Robson and Obeng 2008). The mean rate of employment growth was 14.8% per annum over the period 2011-2013.

Table 8. 14: Results of Hierarchical Model of employment growth (N=68)

Variables	Model 1	Model 2	Model 3	Model 4
Firm control variables				
Firm age	.315 (.018)	.332 (.019)	.315 (.018)	.491 (.028)
Firm size	-2.762 (-.158)***	-2.992 (-.171)***	-2.905 (-.166)***	-2.747 (-.157)***
Prior growth	1.645 (.094)**	1.032 (.059)	.840 (.048)	1.662 (.095)**
Individual control variables				
Entrepreneur's age	3.307 (.189)***	2.731 (.156)***	1.592 (.091)*	2.922 (.167)***
Gender	1.417 (-.081)*	1.312 (-.075)*	1.541 (-.088)*	1.627 (-.093)*
Education	-2.661 (.152)***	-3.082 (.176)***	-2.91 (.168)***	-2.747 (.157)***
Working experience	2.451 (.140)***	2.592 (.148)***	2.415 (.138)***	1.645 (.094)*
Main effects				
H1:Entrepreneurial Passion (EP)		1.627 (.093)*	1.487 (.085)*	1.382 (.079)*
Environment Dynamism (ED)		2.765 (.158)***	2.591 (.148)***	3.482 (.199)***
Political Ties (PT)		2.887 (.165)***	3.115 (.178)***	3.325 (.196)***
Two-way interactions				
H2: EP x PT			4.042 (.231)***	3.922 (.224)***
H3: EP x ED			3.465 (.198)***	3.342 (.191)***
PT x ED			3.727 (.213)***	3.465 (.198)***
Three-way interactions				
EP x PT x ED				3.867 (.221)***
Model Fit				
Constant	-1.88(1.29)***	-1.98(1.22)***	-1.90(1.29)***	-1.69(1.84)***
F-value	1.424**	2.913***	4.122***	4.922***
R^2	.039	.093	.152	.179
Adjusted R^2	.015	.062	.098	.153

N=68. Standardised Beta coefficients (in parenthesis) and t-values are reported. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Critical t-values are 2.325, 1.645 and 1.282 respectively (one-tailed test as all hypotheses are one-directional.

Employment growth data was lagged in order to enhance the study's ability to draw causal inferences from the results (Davidsson, and Delmar, 1997; Delmar, 1997). The statistical implication of the lagged growth variable in the regressions is that, it helps to isolate the analysis from the potential reverse causality between independent and dependent variables and to provide a more robust test of the relationship between the dependent and independent variables (Deesomsak et al., 2004; Zou and Xiao, 2006). In that case, including the lagged growth variable helped in dealing with omitted variable bias (Antonakis et al., 2010).

In each model, the coefficients maintained their significance and hypothesized direction suggesting that the subjective growth measures used in the main regression are robust to alternative explanations (Luk et al., 2005). This finding confirms that there is no substantial gap between objective growth measures commonly used in academic research and what entrepreneurs perceive as actual growth for their own businesses.

8.5 CHAPTER SUMMARY

This chapter focused on an analysis of a number of hypotheses that were developed in chapter four of the study. The hypotheses were developed out of the conceptual framework developed in chapter four. The conceptual framework was divided into two components. The first being the aggregate passion model which focused on analysing entrepreneurial passion linkage with business growth at the aggregate level. This model examined the extent to which overall entrepreneurial passion impact on business growth. The aggregate model further tested two moderators of the overall entrepreneurial passion-business growth linkage. The second part of the conceptual model focused on the relationship of the individual entrepreneurial passion domains with business growth. The impact of each entrepreneurial passion domain on business growth was further examined by examining two moderator

variables (political ties and environmental dynamism). The results of the hypothesis testing are summarised below.

The purpose of hypotheses 1 to 3 was to test the association between entrepreneurial passion and business growth and further explore moderating influence of political ties on the association between the overall entrepreneurial passion and business growth. The data provided support for the three hypotheses. Indeed, previous scholar work suggests that overall entrepreneurial indirectly relates to business success (Baum, Locke and Smith, 2001; Baum and Locke, 2004). The present study did not confirm these findings. Rather, a positive but weak linkage was found between entrepreneurial passion and business growth. Moreover, the results show that overall entrepreneurial passion's influence on business growth is strengthened when the level of entrepreneurs' political connections are greater. Further, the study found that environmental dynamism converts passion into improved growth outcome.

In Chapter 5, the study argued that the individual entrepreneurial passion domains would predict business growth. The purpose of hypotheses 4 to 6 was to explore the extent to which the specific type of entrepreneurial passion predicted business growth. The results showed passion for founding's influence on business growth was positive and significant (H_4). Additionally, passion for developing's impact on business growth was positive and significant (H_6). Thus, hypotheses H_4 and H_6 were confirmed. However, passion for inventing was negatively related to business growth. Thus, hypothesis 5 was not supported in this study.

The purpose of hypotheses 7 to 9 was to test the moderating influence of political ties on the association between the specific type of entrepreneurial passion and business growth. The data provided support for the three hypotheses. Thus, the results showed that political ties moderates the association between passion for inventing, passion for founding and passion

for developing and business growth. This is interesting especially for passion for inventing because results of hypothesis 4 provided results which suggests that higher levels of passion for inventing negatively relates to business growth.

Hypotheses 10 to 12 explored the extent to which the specific type of entrepreneurial passion predicted business growth at varying degrees of environmental dynamism. The results showed that high levels of dynamic environments enhance the association between entrepreneurial passion domains and business growth. Put differently, the results revealed that high levels of environmental dynamism moderate the association between individual passion domains and business growth. Specifically, the results showed that high levels of environmental dynamism moderates the association between passion for inventing, passion for founding and passion for developing and business growth.

To specify alternative explanation for business growth, objective employment growth data (N=68) was obtained from the respondents. A regression analysis of this data confirms the direction of the study's hypotheses suggesting that the subjective growth measures used in the main regression are robust to alternative explanations (see Section 8.5). In the chapter that follows next, the results of the study are discussed.

CHAPTER 9

DISCUSSION AND CONCLUSION

9.1 INTRODUCTION

This chapter serves as a concluding chapter of the study. This chapter, therefore, discusses the findings of the study presented in Chapter 8. In general, the purpose of this chapter is to discuss how the findings from the study contribute to knowledge in relation to the existing literature. As such, this chapter draws implications for theory and practice as well as for policy making. To achieve the objectives of this chapter, the chapter is divided into six subsections and it starts by revisiting the objectives of the study. The second subsection summarises the key findings from the research and discusses the possible theoretical contributions to the passion and entrepreneurship literature. Thus, in this subsection major findings from the study are discussed with a reflection on the study objectives and theoretical contributions from the study. The third sub-section gives an account on implications for entrepreneurial practice whiles the fourth subsection presents an account of the implications for policy making from the study. The fifth subsection of this chapter discusses limitations of the study and opportunities for future research. Finally, a conclusion is drawn from the results of the study.

9.2 REVISITING THE RESEARCH OBJECTIVES

This study was necessitated by the view that entrepreneurial passion is a powerful motivational resource that fosters entrepreneurs' thoughts and actions in pursuit of activities (Baum, Locke and Smith, 2001; Cardon et al., 2013). Yet relatively little evidence exists concerning the influence of passion on business growth and scholarly studies examining the potential moderating effects on the association between entrepreneurial passion and business growth are scarce. As has been stated in Chapter 1, the main objective of the study has been

two-fold. The present study sought to examine the degree to which entrepreneurial passion and its domains predict business growth. The first objective has been the investigation of the association between aggregate passion and business growth and moderators of this relationship. Second, the study examined the association between entrepreneurial passion domains and business growth and moderators of these relationships.

To achieve these objectives, Cardon et al.'s (2009a) three-domain model of entrepreneurial passion, later developed by Cardon et al., (2013), was used as guiding framework. The choice of this framework lies in its acceptance as useful model in entrepreneurial passion research (e.g., Laaksonen, Ainamo and Karjalainen, 2011; Breugst et al., 2012; Cardon and Kirk, 2015).

9.3 DISCUSSIONS AND THEORETICAL CONTRIBUTIONS

Predicting small business growth constitutes an important issue in entrepreneurship research and policy making. This is because small businesses play crucial role in contributing to job creation, innovation and economic growth (Carter and Jones-Evans 2006, Audretsch et al., 2009) and the contribution is highly skewed. For example, in the UK, 4% of new start-up survivors accounted for 50% of jobs created by small businesses ten years later (Storey, 1994).

In less developed market economies, small businesses are widely recogniaed as a major source of employment and income (e.g., McPherson, 1996; Mead and Liedholm, 1998). Yet, their productivity remains low and their sizes small (e.g., Mead and Liedholm, 1998; Tybout, 2000; Mano et al., 2012). As such, scholars have sought to examine the factors that drive business growth (e.g., Baum and Locke, 2004; Baum, Locke and Smith, 2001; Storey, 1994; Wiklund and Shepherd, 2003; Wiklund et al., 2009).

Business growth depends on both external and internal factors. In terms of external factors predicting small business success, scholars have devoted much effort in explaining the influence of environmental variables (e.g., Davidsson, 1989a; O'Gorman, 2001; Wiklund and Shepherd, 2003; Wiklund et al., 2009). For example, scholars have examined external factors such as degree of dynamism, turbulence and competitive intensity of business market environments (Wiklund et al., 2009).

Focusing on the internal predictors of business success, the entrepreneur has been argued to play an important role in small business success (e.g., Storey, 1994). Entrepreneurial passion is one of the internal individual characteristics that has received more scholarly attention in recent times (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004; Cardon et al., 2009a; Cardon et al., 2009b; Cardon et al., 2013). An important question that needs to be answered is: where are we in terms of entrepreneurial passion and businesses growth research? As has been revealed in the literature review section (Table 4.1), the trait approach has revealed that passion is related to venture growth (Baum and Locke, 2004; Baum, Locke and Smith, 2001). However, the mechanism(s) through which passion relates to venture growth has been subject to some debate, with the suggestion that there is an indirect link between passion and venture growth.

A major problem with prior studies into passion is the reliance on trait approach to explain business success because research about entrepreneurs' traits has found weak effects on entrepreneurial behaviour (Aldrich and Wiedenmayer, 1993). Some psychology-based scholars have, however, contended that the trait approach may not reflect passion *experienced* by the individual (e.g., Cardon et al., 2009a; Cardon et al., 2013). These scholars have called for empirical research that focuses on experienced passion. In response to these calls, this study explores the relationship between experienced passion and business growth. This study

contributes to the revival of interest in understanding the effects of entrepreneurial passion on business growth.

Importantly, deriving insights from different theoretical perspectives notably the identity, regulatory focus, contingency and social capital theories, this study explored a direct as well as contingent relationships between passion (and its domains) and business growth. This study contends that political network ties and environmental dynamism positively bolster the effect of passion (and its domains) on business growth. Thus, this study contributes to the contingency view of entrepreneurship literature (e.g., Lumpkin and Dess, 1996; Balabanis and Katsikea, 2003; Wiklund and Shepherd, 2005) by examining key contingencies in the entrepreneurial passion (and its domains)-business growth relationship. By testing the contingency influences of these two variables on the relationship between entrepreneurial passion domains and business growth, this study highlights the situations where the entrepreneurial passion domains may become more important for entrepreneurs and the situations where their utilisation may be adverse for entrepreneurial success.

Existing empirical studies of entrepreneurial passion has fundamentally adopted a unidimensional perspective of passion (e.g., Baum and Locke, 2004) or treated passion in two distinct (harmonious or obsessive) ways in which the entrepreneurship role can be internalised into one's identity (e.g., Ho and Pollack, 2014). The present study categorises entrepreneurial passion into various entrepreneurial roles (e.g., Cardon et al., 2013; Cardon and Kirk, 2015), to provide a more comprehensive and tempered view of entrepreneurial passion by considering three specific entrepreneurial passion domains (i.e. inventing, founding and developing).

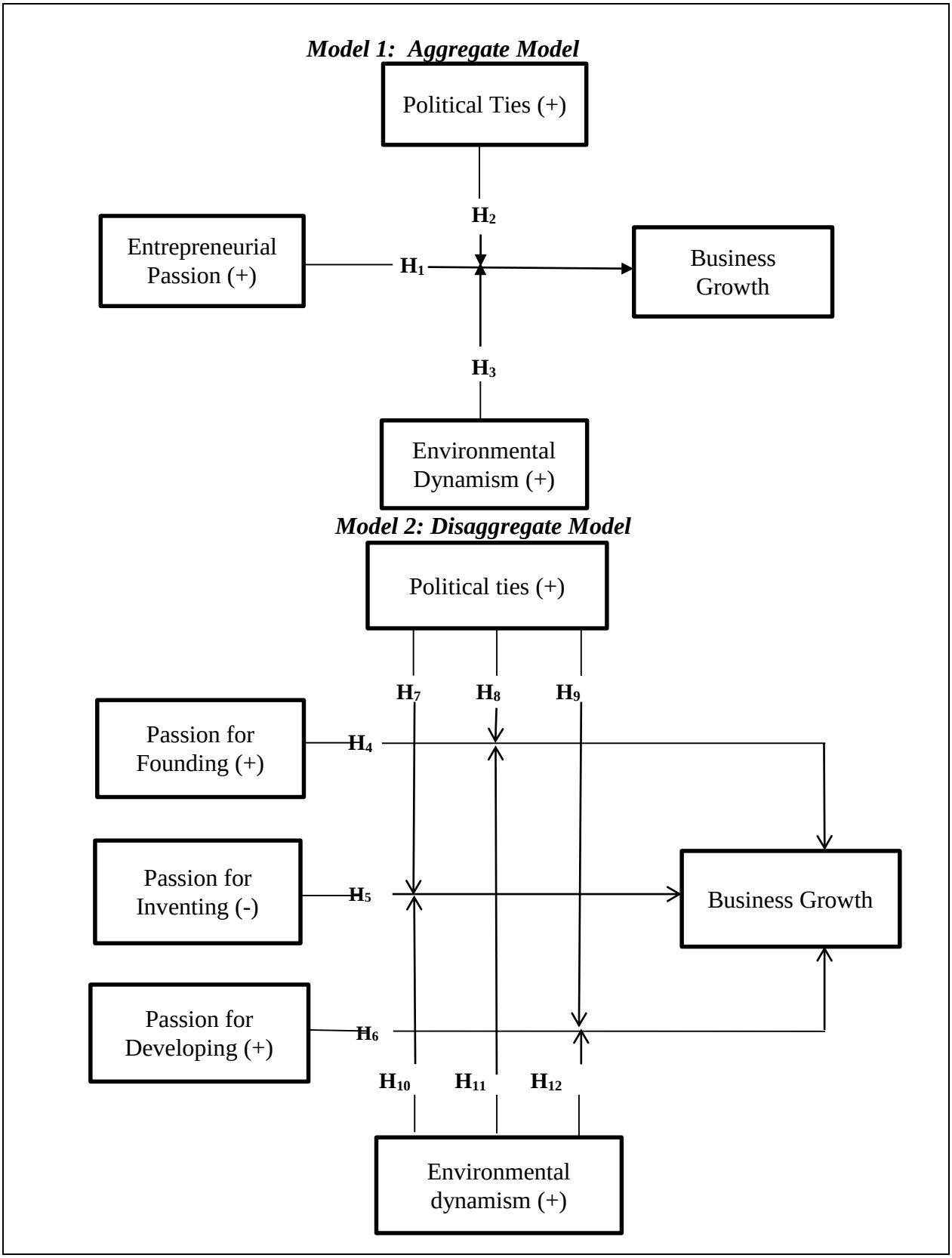

Figure 9. 1: Revised Conceptual Model

Therefore, this study's theoretical contribution to the entrepreneurship literature stems from taking the effect of passion in a different track to argue that factors outside the borders of the firm are influential in successfully translating passion experienced by entrepreneurs into higher growth outcome. This view of passion replaced the trait approach and views passion as a result of being engaged in activities that have a meaning and salience to the individual (Cardon et al., 2009a; Cardon and Kirk, 2015).The sections that follow next highlight the main findings and implications from the study.

9.3.1 Aggregate Entrepreneurial Passion and Business Growth

This study moves beyond the past focus on entrepreneurs' traits to focus on *experienced* passion and business growth. This study therefore, continues prior scholarly studies that treat passion as ''consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur'' (Cardon et al., 2009a: 517). Given that founding and developing a business is replete with uncertain success and constraints, passion can become a key driver of entrepreneurial action (Smilor, 1997; Cardon et al., 2013) and entrepreneurial success. Therefore, this study hypothesised that passion would be positively related to small business growth.

Results of this study are summarised in Chapter 8. To aid in the dicusssion of the results, the study's conceptual model has been revised (see Figure 9.1) based on the results of the study. With regards to the relationship between aggregate entrepreneurial passion and business growth, this study found a positive but weak (10%) association. This study contributes to the entrepreneurship and passion literature by arguing that entrepreneurs' experience of passion is not a consistent driver of business growth. Thus, this study provides an important understanding of the role of passion in small business success. Specifically, with reference to

prior scholarly studies that specified indirect linkage between passion and venture success (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), findings from this study suggests contrarily, arguing that an overall entrepreneurial passion has a direct but weakly related to small business growth. This finding underscores the need to further examine the relationship between entrepreneurial passion and business growth, particularly the context.

Is entrepreneurs' *experience* of passion positively but weakly related business success as this study suggests? Although this study found weak effect of overall passion on business growth, it represents an important step toward unravelling the relationship between experienced passion and business growth. This is because such effect has been conceptually suggested in previous studies (e.g., Cardon et al., 2009a; Cardon et al., 2013). This study argues that previous studies might have suffered from the Institutional Difference Hypothesis (IDH) logic (Julian and Ofori-Dankwa, 2013). The IDH logic reflects the major cross-contextual institutional dissimilarities between developed and developing economies (Hoskisson et al., 2000; Julian and Ofori-Dankwa, 2013). A major argument is that these institutional differences are likely to affect the growth outcomes of businesses. Therefore, the institutional differences between developed and sub-Saharan African economies are likely to lead to different passion-venture growth relationships.

9.3.2 Moderators of the Aggregate Passion-Business Growth Linkage

This study highlights the notion that individuals that experience passion, coupled with certain factors outside the borders of the firm should enhance the growth outcome of their businesses (Porter, 1987; Ciborra, 1997). This contingency notion suggests that the 'fit' between an organisational/individual behaviour and its context (external environment or internal organisational) tends to reflect significant implications on growth outcomes of a business (Venkataraman and Prescott, 1990; Balabanis and Katsikea, 2003; Wiklund and Shepherd,

2005). Additionally, the contingency perspective highlights several ways in which business growth can take place and for that matter one-size-fits-all approach is not sufficient under all conditions (e.g., Burns and Stalker, 1961; Venkataraman and Prescott, 1990; Ginsberg and Venkataraman, 1985; Fredricks, 2004; Wiklund and Shepherd, 2005). Following this logic, this study tested two moderating variables (political network ties and perceived environmental dynamism).

Focusing on political network ties, extant studies have argued that entrepreneurs' political network ties are crucial for entrepreneurial behaviour and action becaue politicians control resources in emerging economies (e.g., Acquaah and Eshun, 2010). Entrepreneurs' network of regulatory authorities and polititians (political ties) serve to attenuate institutional voids in emerging economies and facilitate resource exchanges important for entrepreneurial behaviour to emerge (Acquaah, 2007). Therefore, this study argued that the effect of passion on business growth might be contingent on political ties developed by the entrepreneurs or networks the entrepreneurs identify themselves with.

A major theoretical contribution here is an attempt to examine the moderating influence of political ties on the entrepreneurial passion-business growth relationship. The logic behind this moderator relationship is that, political ties developed by entrepreneurs at different levels of government and officials in government bureaucratic institutions play important role in acquiring resources necessary for the business (Acquaah, 2007) and be successful in raising their passion to achieve higher growth. For example, the central government has influence on business activities in terms of regulation and provision of resources and opportunities in Ghana and many sub-Saharan African economies (Acquaah, 2007; Acquaah and Eshun, 2010). Accordingly, political ties should enable individuals with high levels of passion to better predict higher business growth because special or favourable treatment from

government officials is likely to bolster entrepreneurs' passion to engage in entrepreneurial activities. A major theoretical contribution is that, within the African context political network ties developed outside the borders of the business boosts the impact of passion on business growth.

Following this logic, this study hypothesised that a high level of political ties would bolster the relationship between entrepreneurial passion and business growth. This hypothesis was confirmed based on the findings from this study. Specifically, networks and connections with government officials and regulatory authorities (political ties) positively moderate the association between entrepreneurial passion and business growth. The implication from this finding is that the usually explored mediated relationship between passion and business growth (e.g., Baum and Locke, 2004) might not be applicable in a developing country context.

Regarding perceived environmental dynamism, scholarly studies suggest that dynamic environments are characterised by unpredictability and rapid change, with increased uncertainty for individuals and firms operating within them (e.g., Dess and Beard, 1984; Hmieleski and Baron, 2009). Additionally, dynamic environments foster entrepreneurial opportunities (Kirzner, 1997; Shane and Venkataraman, 2000). Conversely, dynamic environments present challenges because there is a high level of uncertainty (Aldrich, 2000) and a heavy information processing burden (Chandler, Honig and Wiklund, 2005). For example, it has been suggested that dynamic environments foster entrepreneurial behaviours such as innovativeness, proactiveness, and risk-taking (Covin and Slevin, 1989; Miller and Friesen, 1982a, 1982b; Fini et al., 2012).

Moreover, researchers have argued that without dynamic environments, it would be difficult for entrepreneurship to surface and this could lead to fewer opportunities for individuals

(Sakarya, Eckman, and Hyllegard, 2007). Accordingly, this study argued that those individuals who experience high levels of passion in dynamic as oppose to static; industry environments would be particularly potent in leading their businesses and would feel more confident in the enactment of entrepreneurial actions. Findings from the present study revealed that perceived environmental dynamism has significant positive effect on the linkage between aggregate passion and business growth. Thus, this hypothesis was confirmed by the findings of this study.

The implication is that, the potential for boosting the effect of passion on business growth is higher in dynamic environments as opposed to stable; industry environments. That is, when the environment is in a state of flux, the benefits entrepreneurs gain from passion in enhancing the growth of their businesses are higher. As such, prior scholarly studies that have concluded an indirect relationship between passion and business growth might be overly simplistic. It must, however, be emphasised that the chance for failure in dynamic environments is also greater (Markides and Geroski, 2004). This point has been stressed by Hmieleski and Baron (2009) contending that ‘‘the effects of the few who succeed may be offset by a considerably greater number of relatively poor performers’’. Conversely, stable environments may provide an opportunity for long-term survival, less opportunity for impressive gains.

This study’s results show that high entrepreneurial passion coupled with high environmental dynamism increase the advantage of entrepreneurs successfully leading their businesses. Thus, this study’s results help shed new light on *why* prior conclusions on the relationship between passion and business growth might be overly simplistic. This study suggests that the relationship is contingent on moderating factors.

9.3.3 Individual Passion Domains and Business Growth

As has been stated in Chapter 1 (Section 1.3), this study sought to examine the effects of individual passion domains on business growth. Cardon et al., (2013) suggested that scholars should model the experience of entrepreneurial passion in each domain in order to explore the effect of each domain on a dependent variable of interest. Indeed, the relationship between individual passion domains and business growth is less understood.Therefore, this study broadens scholarly knowledge on determinants of business growth by examining the role of individual passion domains in business growth process.

This study addresses an important issue in Cardon et al.'s (2013) study, contending that the domains of entrepreneurial passion might differentially influence business growth. Thus, this study argued that some of the domains of passion might be harmful to business success while others might improve business growth. Hence, the findings that passion indirectly relates to business growth (Baum, Locke and Smith, 2001; Baum and Locke, 2004) need to be examined further as the approach adopted in previous scholarly studies might disguise the real value of passion in business growth. Moreover, individuals need not necessarily experience all entrepreneurial passion domains in order to achieve business success (Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015). This study contributes to the literature by offering a new approach (disaggregate effect model) to examining the effect of entrepreneurial passion on business growth.

In this study, three domains of entrepreneurial passion were hypothesised to drive business growth. As the results of this study show, not all individual entrepreneurial passion domains positively relate to business growth. In particular, passion for founding and passion for developing were found to provide positive value for business growth. However, high levels passion for inventing was found to be negatively related to business growth.

As has been argued by some scholars, entrepreneurs experiencing passion for inventing seek activities associated with scanning the environment for new market opportunities, developing new products or services (e.g., Cardon et al., 2009a; Cardon et al., 2013). Such activities have been conceptually suggested to influence business growth outcomes (e.g., Katila and Ahuja, 2002; Cardon et al., 2009a; Cardon et al., 2013; Murnieks et al., 2014). It is, however, surprising to find that passion for inventing is negatively related to business growth. A major explanation for this result could be that, as firms get older, individuals leading such firms tend to involve in activities other than inventing. For example, individuals leading older firms may be interested in assembling financial, human and social resources needed to develop the firm further.

Additionally, it can be argued that the tendency of some individuals to focus on scanning the environment for new market opportunities and developing new products or services (Cardon et al., 2009a) might be concealed by regular product line extension and product adaptation activities as part of their effort to innovate (Atuahene-Gima and Ko, 2001). This is likely to obscure the value of scanning the environment for new product opportunities and developing new products (passion for inventing).

Focusing on the relationship between passion for founding and business growth, this study found a positive linkage. Although, previous scholarly development offers little understanding on the linkage between passion for founding and business growth, this study hypothesised a positive relationship between passion for founding and business growth. The positive linkage reported in this study suggests that emphasising on individuals' passion for founding within small businesses might drive higher growth outcome. Prior studies suggest that the desire to found an organisation is a significant motivator for many entrepreneurs (e.g., Aldrich and Zimmer, 1986; Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk,

2015). As argued by some scholars, entrepreneurs' need for achievement finds itself in the founding activities of entrepreneurs (e.g., Katz and Gartner, 1988). As such, entrepreneurs who experience high levels of passion for founding are considered habitual entrepreneurs (Ucbasaran et al., 2008). Thus, entrepreneurs who experience passion for founding are expected to translate this passion into high growth outcomes (Cardon et al., 2009a). The reason is that experiencing passion for founding encourages entrepreneurs to be more inclined to assembling the necessary resources to create successful businesses (Cardon et al., 2013). Additionally, the experience gained as a result of founding new businesses may serve as a resource for implementing growth strategies.

Regarding passion for developing, scholars suggest that it reflects growth and expansion of the business after founding (Cardon et al., 2009a). After a business has been found, the founder puts in much effort to grow and expand the business (Cliff, 2008). The positive association reported in this study suggests that encouraging entrepreneurs to develop their businesses after founding might yield growth benefits directly because, these entrepreneurs often develop different strategies for organisational management than their counterparts (Gundry and Welch, 2001). Some scholars have argued that entrepreneurs who experience passion for developing exhibit different management styles (Smith and Miner, 1983) and they tend to enjoy activities as increasing sales, hiring new employees or finding external investors to fund such activities (Cardon et al., 2013; Cardon and Kirk, 2015).

Altogether, it would be reasonable to conclude that the entrepreneurial passion-business growth linkage is more sophisticated than theory indicates because as this study suggest, not all the domains of passion are favourable for business growth. Additionally, the results of this study suggest that the benefit of individual entrepreneurial passion domains (i.e. disaggregate passion) is higher than the sum of the domains. The reason is that while overall

entrepreneurial passion has a positive but weak relationship with business growth (significant at 10%), the growth benefits of some of the entrepreneurial passion's domains strongly and positively relate to business growth. The implication is that, it will be beneficial for entrepreneurs to focus on the specific passion domains that allow them to grow their businesses. This is because, this study indicates which entrepreneurial domain(s) passion is or are likely to drive business success. Thus, this study has explored an important omission in the entrepreneurial passion literature.

Theoretically, since this study shows how different disaggregated constructs of passion have different impacts on business growth, it suggests that passion needs to be disaggregated. It is sensible to characterise passion in the three separated forms. This role-identity-specific form of passion enables scholars to understand the differential role of entrepreneurial behaviour and its consequences for society. It has been suggested that activities related to roles that are meaningful to the self-identity of individuals are crucial in performing certain activities including entrepreneurship (Farmer et al., 2011). Yet empirical studies on passion have ignored activities related self-identity of respondents (Cardon et al., 2013). The present study extends the extant literature on passion by advancing an approach that specifically articulates the self-identity of entrepreneurs. In the Ghanaian context, this study shows how the role-identity-specific form of passion is related to the consequences of the entrepreneurs' behaviour.

The section that follows next explores the disaggregate effect model of entrepreneurial passion by examining the moderating influence of political ties and perceived environmental dynamism on the association between individual passion domains and business growth.

9.3.4 Moderators of the Link between Individual Passions and Growth

Another contribution of this study lies in the examination of moderators of the link between entrepreneurial passion domains and business growth. Majority of studies in management and entrepreneurship analysing the influence of entrepreneurial passion on business growth do so with no consideration of the moderating effects. Instead, scholarly studies have posited a mediation role of passion in business growth process (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004).

Hypotheses 7 to 9 contended that the relationship between the individual entrepreneurial passion domains and business growth are moderated by the levels of political ties. The study's results found support for these hypotheses. As can be seen from Table 8, all the hypotheses were supported.

Focusing on hypothesis 7, this hypothesis argued that the effect of passion for inventing on business growth would be enhanced if the level of entrepreneurs' political ties increase. Results of the hypothesis showed that the negative association between passion for inventing and business growth is positive and significant when political ties increase. This result suggests that political ties with government officials help to reduce the negative impact of passion for inventing on business growth. This result also suggests that entrepreneurs' role identity as inventor is most beneficial when they identify themselves with networks of politicians and regulatory authorities. These networks are important social resources for businesses operating in sub-Saharan business environment where formal institutional constraints remain relatively high and business people often rely on connections with those in power to achieve their business objectives (Acquaah, 2007; Acquaah and Eshun, 2010). Thus, for activities associated with scanning the environment for new opportunities, developing

new products or services to reap benefits for small businesses operating in this challenging environment, it is important to establish political connections.

A growing scholarly literature suggests that businesses in emerging economies benefit from political ties (e.g., Child and Tse, 2001; Park and Luo, 2001, Acquaah, 2007; Acquaah and Eshun, 2010; Wang and Chung, 2013). These preferential treatments include fewer bureaucratic delays, both monetary and non-monetary incentives such as getting tax holidays and obtaining land, and licenses. Thus, for regular product development activities associated with passion for inventing to generate beneficial returns, entrepreneurs require political ties.

Regarding hypothesis 8, this study argued that the link between passion for founding and business growth is moderated by high levels of political ties. The results showed that at 1% level of significance, the relationship between passion for founding and business growth is stronger when political ties increase. This result suggests networks are seen as filling the institutional void and facilitate the resource exchanges important to enable firms to develop (Khanna and Palepu, 1997), where "institutional voids force managers to rely on personal ties and connections to substitute for formal institutional support" (Li, Poppo and Zhou 2008:384). Therefore, networks are crucial for spurring the effect of entrepreneurs' passion on business growth outcome in a less developed market economy.

Focusing on hypothesis 9, this study argued that the effect of passion for developing on business growth would be enhanced if the level of entrepreneurs' political ties increases. Results showed that the moderator effect was positive and significant at 1%. This result suggests that the positive association between passion for developing and business growth is more positive at high levels of political ties. This result can be taken to suggest that entrepreneurs' proclivity to grow and expand their businesses after founding (Cardon et al.,

2009a) is enhanced to generate superior business outcome when political networking activities are stronger.

The study's results have some implications for business growth theory enhancement. The literature suggests that passion is at the heart of entrepreneurship (Cardon et al., 2005a; Cardon and Kirk, 2015) and given that entrepreneurs decide to launch new products and services in the face of several constraints and challenges, passion has long been argued to be a key driver of entrepreneurial action (Cardon et al., 2013). However, as the results of the study have revealed that an all-inclusive adoption of entrepreneurs' experience of passion might not be beneficial for small business growth; indicating that the entrepreneurial passion domains may produce differential growth outcomes. Moreover, this study suggests that entrepreneurial passion domains differentially drive business growth under high levels of political ties. The implication is that scholars design studies to include the role of entrepreneurial passion domains in business growth process and examine the contingent effect of political connections on this linkage.

This study argued in hypotheses 10 to 12 that high levels of perceived environmental dynamism would positively moderate the influence of entrepreneurial passion domains on business growth. With regards to passion for inventing and business growth interaction term, the results of this study supported the hypothesis that high levels of perceived environmental dynamism moderate the association between passion for inventing and business growth. Thus, in highly dynamic environments, passion for inventing positively influences business growth. This result can be taken to suggest that activities associated with scanning the environment for new product opportunities, developing new products or services and designing prototypes (passion for inventing) (Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015) can enhance growth outcomes in highly dynamic environments. Put

differently, this study suggests that experiencing high levels of passion for inventing will be particularly better for entrepreneurs leading their businesses in dynamic, as opposed to stable, industry environments. Indeed, scholars have argued that, in more dynamic and competitive environments, there is a high chance of individuals enacting entrepreneurial behaviours (Meyers and Marquis, 1969).

As has been argued by some scholars, some entrepreneurs search for innovative ideas deeper than others (Katila and Ahuja, 2002) and considering the importance of highly dynamic environments in strategic decision making (Eisenhardt, 1989), this study suggests that entrepreneurs experiencing high levels of passion for inventing would be at a particular advantage in leading their businesses in dynamic, as opposed to stable, industry environments. As has been suggested in previous studies activities associated with inventing may enhance firm-level outcomes when it is accompanied by high levels of activation (e.g., Baas et al., 2008; Cardon et al., 2013). This suggests that the relationship between passion for inventing and business growth are likely to be stronger in environments that generate high levels of activation; as opposed to low levels of activation.

Focusing on hypothesis 11, this study argued that the association between passion for founding and business growth would be positively moderated by high levels of environmental dynamism. The results find support for this hypothesis. This result suggests that activities relating to assembling the necessary financial, human and social capital (passion for founding) (Cardon et al., 2009a) will produce high growth outcome in highly dynamic, as opposed to stable, industry environments.

As the existing literature suggests, the desire to found an organisation serves as a motivator for many entrepreneurs (Aldrich and Zimmer, 1986). This study contends that for the motivation of entrepreneurs to translate into high growth outcomes, entrepreneurs need to

operate in highly dynamic environments characterised by unpredictable and rapid change; with high levels of uncertainty for individuals and businesses (Dess and Beard, 1984).

It has been established that environmental dynamism fosters entrepreneurial opportunities (Kirzner, 1997; Shane and Venkataraman, 2000). This suggests that when entrepreneurs experience high levels of passion for founding, they are likely to lead high growth businesses in dynamic environments than their counterparts operating in stable, industry environments. Put differently, the significant interaction between environmental dynamism and passion for founding supports the logic that businesses can produce high growth outcomes when entrepreneurs leading such firms experience high levels passion for founding in environments characterised by uncertainty and rapid change.

Regarding hypothesis 12, this study argued that the link between passion for developing and business growth would be enhanced at high levels of environmental dynamism. The results of this study supported this hypothesis. Thus, the results revealed that environmental dynamism positively moderates the impact of passion for developing and business growth. This result can be taken to suggest that passion for developing which is associated with the growth and expansion of the business after founding (Cardon et al., 2009a), produces higher growth outcomes in dynamic, as opposed to stable, industry environments. The significant interaction between passion for developing and environmental dynamism offers support for the notion of this study that, entrepreneurs experiencing high levels of passion for developing can earn large returns with regards to growth outcomes in highly dynamic environments as opposed to stable, industry environments.

The results outlined above have some implications for theory development. First, they help clarify the potential role of *experienced* passion in entrepreneurhip. As noted earlier, such a role has been conceptually predicted (e.g., Brannback et al., 2006; Cardon et al., 2009a;

Cardon et al., 2013; Cardon and Kirk, 2015), but to date, no empirical studies have steped up to examine this reslationship. Moreover, many scholars associate passion with entrepreneurship (e.g., Cardon et al., 2005; Baron, 2008; Sundararajan and Peters, 2007). This study establishes that when entrepreneurs experience passion, they can enhance growth of their businesses more so when they experience passion for founding and developing.

Second, the present findings add to scholarly effort in understanding the complex processes through which individual-level variables such as passion ultimately influence firm-level outcomes such as business growth. Attaining greater understanding of these processes has been identified as as a crucial effort in entrepreneurship (e.g., Baron and Tang, 2011; Baum and Locke, 2004). The present study contributes to scholarly progress on this task clarifying mechanisms through which individual-level variables can influence business growth.

Third, the present study study lends credence to extant studies that have conceptually demonstrated that passion can drive business success (e.g., Cardon et al., 2005a; Sundararajan and Peters, 2007; Cardon et al., 2009a; Cardon et al., 2013; Cardon and Kirk, 2015) but diverge with prior studies that found passion to be indirectly related to passion (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004). Moreover, the present study argues that the entrepreneurial passion domains generate differential growth outcomes more so at high levels of dynamic environments. The present findings extend prior scholarly conclusions to the realm of entrepreneurship by speficically clarifying that passion among entrepreneurs may enhance business growth.

Fourth, it is crucial to examine the conditions under which passion (and its domains) is least and most effective individual-level variable and to determine the extent to which its effectiveness is conditioned by poltical network and dynamic contexts. The results reveal that factors outside the borders of the firm, in the form of poltical network ties and environmental

dynamism, further maximizes the growth benefits of high levels of passion (and its domains). This novel contribution to the entrepreneurial passion literature made by the current study suggests that the development of political network ties increases the impact of passion (and its domains) on business growth. These findings offer interesting extensions to prior scholarly work (e.g., Baum and Locke 2004; Baum, Locke and Smith, 2001). As in most developing economies, business-supporting systems in Ghana are weak with under-developed legal and regulatory institutions, meaning that commercial laws and regulations are not strictly enforced by government officials (Acquaah, 2007). As a result, exclusive reliance on passion may not be sufficient for business growth. Thus, the current study shows that small businesses in Ghana are able to facilitate the growth benefits of their passion by building strong ties with governmental agencies and politicians. Additionally, this study extends prior research on passion (e.g., Baum and Locke, 2004; Cardon et al., 2013; Cardon and Kirk, 2015) by testing the moderating influence of dynamic environments on the relationship between passion (and its domains) and business growth. Prior research has argued that individuals' passion contributes to business growth (e.g., Baum and Locke, 2004). Yet it is still unclear the role of dynamic environments in impacting on this relationship. The present study's findings provide substantial support for considering environmental dynamism as an important moderator to further specifiy the relationship between passion (and its domains) and business growth.

9.4 IMPLICATIONS FOR PRACTICE

Generally, this study offers several practical implications for entrepreneurs. First, while enecdotal evidence is not scant regarding the important role of passion to the success of an entrepreneur, scholarly studies explaining its consequences have been scarce (Cardon and Kirk, 2015). This study offers support to theory that considers entrepreneurial passion as a unique affective experience related to the entrepreneur's self-identity and the type of role he

or she is engaged in (Cardon et al., 2009a; Cardon and Kirk, 2015). This notion is important because entrepreneurship drives economic growth (David, 2007) and if passion is an affective process that can be identified, harnessed and nurtured, entrepreneurial efforts can be encouraged and nurtured (Cardon and Kirk, 2015). Therefore, if entrepreneurs are able to understand the nature of the passion that is driving them, they may be able to harness it and leverage it to aachive their entrepreneurial goals (Cardon et al., 2009a; Cardon et al., 2015).

Second, this study has revealed that, to a large extent, entrepreneurial passion is important for achieving business growth. In particular, this study suggests that high levels of passion for founding and passion for developing enhance business growth. However, this study indicates that experiencing passion domains does not guarantee business growth at all times. Put differently, simply experiencing entrepreneurial passion domains does not necessarily enhance business success. For example, assembling financial, human and social resources to create a new business at a time when an existing organisation needs recapitalisation may not generate growth for the existing business. Moreover, growth and expansion strategies (Gundry and Welch, 2001) designed by entrepreneurs as a result of experiencing passion for developing are likely to generate higher growth outcomes when they offer competitive advantage (Penrose, 1959; Barney, 1991). The implication of this is that, investors have incentives to grandstand (Gompers, 1996). Indeed, investors are interested in putting their investments in firms that can be brought in public for an initial public offering (IPO). As a consequence, an assessment of entrepreneurial passion (and its domains) may aid potential investors during the due diligence process (Chen, Yao and Kotha, 2009) which is currently limited to assessing the individual's track record and management skils (Shepherd and Zacharakis, 1998). The finding that entrepreneurial passion domains differentially relate to business growth is relevant to venture capitalists' selection procedure in order to make informed decision as to which applicant to fund. Thus, an assessment of entrepreneurial

passion domains experienced by the individual may complement the human capital of the individual when venture capitalists undertake due diligence. The study's findings may help offer insights to investors who could try match entrepreneurs' passion to their growth objectives.

Third, the findings reveal that some of the domains (i.e. passion for developing and passion for founding) of passion have a significant impact on business growth outcome. This study suggests that entrepreneurs need to be more aware of passion that may be shaping the strategic direction of the business.

Fourth, the findins suggest that the effect of passion (and its domains) on business growth is not a static situation. The level of dynamismin the environment plays a significant role in the relationship between passion (and its domains). Prior research has argued that, whilst it would be benign for entrepreneurs to experience passion in dynamic and changing environments, the potential for achieving major success may be higher in dynamic environments than in stable ones, the chance of failure is also high (Markides and Geroski, 2004). Indeed, prior research has established that individuals can learn to be more passionate (e.g., Baum and Locke, 2004). Consistent with this evidence, this study highlights the importance of passion development in order to respond to the environmental changes to support business growth.

Fifth, this study revealed that a high level of political ties is required to support entrepreneurial passion and its domains to enhance business growth. Against this background, this study recommends that entrepreneurs who experience high levels of passion should connect with politicians and officials of regulatory institutions because political connections serve as important resources which enable businesses to secure the necessary resources, information and knowledge (Acquaah, 2007). Therefore, managers of small

businesses may wish to pay greater attention to not only passion they experience but also political ties in implementing their entrepreneurial behaviours.

Sixth, the study's results have practical implications for facilitating business growth. The findings reveal that some of the domains (i.e. passion for developing and passion for founding) of passion have a significant impact on business growth outcome. This study suggests that entrepreneurs need to be more aware of passion may be shaping the strategic direction of the business. Moreover, this study suggests that when all the domains of passion are combined, its effect on business growth is weak. This lends credence to the trait approach which has also offered weak effects on business success (e.g., Baum and Locke, 2004; Baum, Locke and Smith, 2001). As such this study offers implication for the revival of interest in understanding the effects of entrepreneurs' personal characteristics.

Finally, this study's results revealed that not all entrepreneurial passion domains positively relate to business success. For example, passion for inventing was found to be negatively related to business growth. An implication is that a more effective approach may be to train entrepreneurs to self-regulate their passion in ways that permit them to be positive toward business growth. As suggested by the regulatory focus theory (Higgins, 1997), individuals may not attach the same weight to potential opportunities as to the potential risks. This study suggests that it is important to develop of a self-regulatory technique that may be beneficial to entrepreneurs who are best able to regulate and direct their own passion. This study recommends that entrepreneurs should pay particular attention to how their inherent levels of passion interact with their political connections and environmental impact on their capability to achieve high growth outcome.

9.5 IMPLICATIONS FOR POLICY

As the entrepreneurship literature points out, the role of passion is critical for explaining business success (Cardon et al., 2005a; Sundararajan and Peters, 2007). There are several implications to be derived from the conclusions of the study for public policy-making, especially from less developed market economies such as those in sub-Saharan Africa (e.g., Ghana). First, a crucial element of an individual's entrepreneurial development is to nurture the individual to perceive, understand and regulate passion (Drnovsek, Cardon and Murnieks, 2009). Indeed, there is a pressing need for governments and policy makers to improve growth outcomes of small businesses, especially in developing country settings. This study suggests that one way to achieve this is to nurture the individual to perceive, understand and regulate passion. An important implication for policy makers is that, investment is required to develop entrepreneurs' mind-set to include the individual's specific type of passion to achieve high growth outcomes. The findings may inform parties involved in education such as public policy on education and training of current and potential entrepreneurs. The study's findings can help career mentors, coaches, and policy makers in designing policy relevant interventions that bring in entrepreneurialism into the career development and guidance process. Given that passion an important component of entrepreneurship (Cardon et al., 2009a), training programs can be designed to develop cognitive-related processes involving passion that extend beyond creating new ventures to include the broader career context. For example, entrepreneurship educational programmes are needed to train entrepreneurs to develop and self-regulate the specific type of passion needed to achieve high growth outcomes as people may develop passion to dela with specific sitations (Cardon et al., 2013). Second, entrepreneurs need support from their governments and other organisations to operate successfully. This is important because entrepreneurs encounter constraints to growth (Robson and Obeng, 2008; Saridakis, Mole and Hay, 2013). Indeed, the literature highlights

the significance of the external environment for supporting entrepreneurial activities (e.g., Fini, Grimaldi and Sobrero, 2009). Third, the present study suggests that one way to better prepare individuals' mindset in the society may be to encourage them to increase their passion for entrepreneurship and opportunities. Efforts can also be made to help them acquire more entrepreneurial mindsets for potential opportunities. This could have implications for labour policies that have traditionally called for more emphasis on entrepreneurship to tackle the economic challenges of work and employment for the youth (United Nations, 2001).

9.6 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although the literature provides much insight into business growth outcomes of passion (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004), this study represents a new attempt to further blossom the scope of entrepreneurial passion research. As such, examining entrepreneurial passion in a developing country context where institutional frameworks have been argued to be weak (Hoskisson et al., 2000; Acquaah, 2007; Boso, Story and Cadogan, 2013), the analysis of the aggregate and disaggregate influence of entrepreneurial passion on business growth and the examination of moderating influences of political ties and environmental dynamism on this linkage represent a significant contribution both theoretically and empirically to the prevailing entrepreneurial passion and business growth literature.

As with all entrepreneurship and management research, this study has some limitations that offer opportunities for future research. First, the study was undertaken in Ghana, a small sub-Saharan African economy. Although Ghana shares many of the characteristics of developing economies, this study recommends that the study's conceptual model be replicated in different contexts before any generalisation is made. In other words, although the study's sample consists of active small manufacturing businesses operating in Ghana, this study

recommends that samples from other less developed market economies (e.g., Nigeria) would be required for generalisation.

Second, this study recommends that future studies should be geared towards how entrepreneurial passion domains influence growth outcomes of small businesses operating in advanced economies (e.g., United Kingdom). Although previous studies provide some insights of the association between passion and venture growth, the passion they studied did reflect entrepreneurs' *experience* of passion. Instead previous studies captured passion as a trait variable (e.g., Baum and Locke, 2004; Baum, Locke and Smith, 2001). Exploring how entrepreneurial passion domains affect business growth outcomes from the perspective of advanced nation settings will provide further insights into the nature entrepreneurial passion in other economies.

Third, while the study's theoretical framework provides much insight into the relationships between the variables used for the study, the cross-sectional design of the current research limits the study's ability to make causal claims about observed relationships. Although a post hoc analysis (Table 8.14) revealed no differences between the effect of passion on subjective growth measures and objective measure (employment growth), further research could use longitudinal designs to elucidate the long-term, causal link between entrepreneurs' passion and business growth, as well as how entrepreneurs' network of politician and environmental dynamism might influence this linkage. Moreover, special attention was paid during the data collection stage to separate the independent and dependent variables yet this study recommends that future studies may use longitudinal design in order to make causal claims.

Fourth, this study recognises the limitation of relying on single respondents for information regarding both the dependent and independent variables. Prevailing literature suggests that there is a course of concern for common method variance when studies rely on single

respondents for information (Podsakoff et al., 2003; Chang, van Witteloostuijn and Eden, 2010). This study used several techniques to counter common method variance. For example, before the main survey, (referred to as ex-ante stage), the questions were mixed using reverse-coded items and informants were assured of complete confidentiality of information they provided (Chang, van Witteloostuijn and Eden 2010). Statistically, this study followed previous scholarly studies (e.g., Cote and Buckley, 1987; Boso, Story and Cadogan, 2013) and estimated three competing models (Table 7.16) to examine whether common method variance was a problem in this study. Findings from the three models suggest that common method bias is not a major concern in this study. Future research is encouraged to counter common method bias through trying to obtain some data from archival sources, if possible but also to try and collect data at a subsequent different point in time (Podsakoff et al., 2003).

Fifth, the results are based on individuals leading small businesses from the manufacturing sector, and so it is not known whether individuals managing small businesses in the service and other sectors would demonstrate the same passion. This must be taken into consideration when interpreting the results of this study. Although using a single-industry is able to deal with confounding industry-specific conditions (Baum and Locke, 2004), the present study recommends that future studies may include other sectors.

Finally, the use of self-reported and perceptual measures of business growth has the potential to introduce respondent bias to the sample. While the business growth measure used in the current study is widely adopted in management research (e.g., Rauch et al., 2009; Anderson and Eshima, 2013), the present study encourages additional research that makes use of secondary sources of financial information.

9.7 CONCLUSION

The current study has shed some lights on the theory of entrepreneurial passion. Earlier investigation of the potential role of entrepreneurs' passion in business growth outcomes provided mediating relationships (Baum, Locke and Smith, 2001; Baum and Locke, 2004). Many factors might have contributed to these results including inadequate operationalisation and measurement of variables. In contrast, this study focused on entrepreneurs' *experience* of passion and how entrepreneurs report the passion they experience. Following this notion, the study adapted an instrument developed by Cardon et al., (2013) and used in other studies (e.g., Cardon and Kirk, 2015). As such, this study has been based on well-established theoretical underpinnings. First, the resulting findings provide evidence that entrepreneurial passion and its domains matter in business growth outcome. Second, the study found that the positive association between passion and business growth is positively moderated by political ties and environmental dynamism. Third, the study found that individual passion domains differentially influence business growth. For example, whiles passion for inventing negatively relates to business growth, passion for founding and passion for developing positively relate to business growth. Fourth, political ties and environmental dynamism positively moderate the domains of passion-business growth linkage such that their association with business growth is more positive.

Several limitations have been highlighted. Limitations aside, this study represents a significant step in addressing issues regarding passion and business growth. A major theoretical contribution from the study is the development and testing of aggregate and disaggregates models of entrepreneurial passion to explain business growth outcomes. The use of data from Ghana to examine the entrepreneurial passion scale and to assess growth outcome of small businesses offers a significant contribution to the entrepreneurship field. Moreover, this study responds to a call by Cardon et al., (2013) to examine entrepreneurial

passion in a different setting. As a result, the findings contribute to the literature on the entrepreneurship. The present study not only examines how passion influences business growth, but also reveals how environmental dynamism and political ties moderate the effectiveness of entrepreneurs' passion in business growth process. It is hoped that findings from this study will incite further research into the domains of entrepreneurial passion and business growth in other geographical settings. Finally, the managerial and policy recommendations provided in this study will be of importance to practising entrepreneurs and policy makers.

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APPENDIX A: COVER LETTER (PILOT STUDY)

Email: s.adomako@warwick.ac.uk October, 2013

Dear Sir/Madam,

SMALL BUSINESS GROWTH SURVEY

Thank you very much for deciding to participate in my research on small business growth. I am a doctoral researcher from University of Warwick and I am undertaking my research in the area of entrepreneurship and Innovation. This study is being sponsored by the Warwick Business School. As part of my research I need to contact entrepreneurs in Ghana.

To assist me in my research, I would therefore be very grateful if you could complete this questionnaire for me. Completing the questionnaire should take you up to 20 minutes. I have provided instructions for the completion of each section of the questionnaire. You are kindly reminded that there are no right or wrong answers to the questions asked. Again, as I do not ask you for your name, you are guaranteed complete confidentiality and anonymity.

As a way of expressing my appreciation for assisting me in my research, you will have a chance of winning a £100 cash prize in your name for your favourite charity. Please include your business card or write your email at the back of the questionnaire so that I can notify you in case you emerge as the winner of the prize draw, and to ensure that the summary report is sent to your preferred contact address. Your assistance with this study is very much appreciated. Should you have any queries, please do not hesitate to contact me on the contact details provided at the top of this letter or any of my doctoral supervisors: Dr Kevin Mole (Associate Dean, PhD Programme), Warwick Business School (Tel: +44(0)24 765 23918; Email: Kevin.Mole@wbs.ac.uk; and Professor Stephen Roper, Director, Enterprise Research Centre, Warwick Business School (Tel: +44 (0)24 765 22501; Email: Stephen.Roper@wbs.ac.uk).

Thank you for your help.

Yours sincerely,

Samuel Adomako, Entrepreneurship & Innovation Group

APPENDIX B: PILOT QUESTIONNAIRE

Serial No.:

SMALL BUSINESS GROWTH IN GHANA

SAMUEL ADOMAKO
Doctoral Researcher
Warwick Business School,
The University of Warwick,
Coventry CV4 7AL,
United Kingdom.
Email: s.adomako@warwick.ac.uk

Thank you very much for deciding to participate in the research on small business growth in Ghana. I am a doctoral researcher with the Entrepreneurship, Innovation and Management Group, Warwick Business School, The University of Warwick, in the United Kingdom. I am interested in small business growth. Findings from this study will be used entirely for academic purposes. Your co-operation in completing this questionnaire is central to the success of this research. Please make each question a separate and independent judgement. There is no right answer to the questions asked, as different entrepreneurs have unique ways of managing their businesses. When complete, please kindly return this questionnaire to the field officer who is handing it in to you. As we do not ask you for your name, you are guaranteed complete confidentiality and anonymity. Only general findings from the study will be reported. Please kindly include your business card or write your email/mobile number at the back of the questionnaire so that we can be sure that a summary report is sent to your preferred contact address. Again, there is no way this will be linked to your answers provided. Once again, thank you very much for your participation in this research. You may respond in complete frankness; all your answers will remain *absolutely confidential*. The questions in this booklet are to be completed by the ENTREPRENEUR/FOUNDER ONLY.

SECTION A: INFORMATION ABOUT YOUR BUSINESS

A1: Is your business in an urban or rural location? *(Please circle one box)*

Urban (cities and large towns)	1
Rural (small towns and villages)	2

A2. What sector does your business belong? (*Please circle appropriate box*)

Manufacturing	1
Service	2
Agriculture	3

A3. What is the type of legal organisation is your business? (*Please circle appropriate box*)

Unregistered sole proprietorship	1
Registered sole proprietorship	2
Partnership	3
Private limited liability	4
Others (Please specify)	5

A.4: Please provide your best estimate of your business' turnover and number of employees between 2011-2013

	2011	2012	2013
Turnover			
Number of employees			

A5. Since start-up, has the company raised money as debt/equity?

Yes	No

A6: If yes, please indicate the percentage of money raised as debt/equity (since start-up)

Public financing	Private financing (Micro-finance firms)	Bank	Friends/Family	Personal financing	Total
%	%	%	%	%	100% Equity
%	%	%	%	%	100% Debt

A.7 How long has your company been in business (in years)? …….

A8. Does your business have any external partner/stakeholder?

Yes	No

A9. Does your business engage in exporting activities?

Yes	No

A10: In the market your business operates in, are there great differences among the products/services with regard to customers' buying rights, nature of competition and market dynamism and uncertainty (1=about the same for all products; 7=varies a great deal from one line to another):

1. Customers' Buying Rights

About the same for all products	1	2	3	4	5	Varies a great deal from one line to another

2. The nature of the competition

About the same for all products	1	2	3	4	5	Varies a great deal from one line to another

3. Market dynamism and uncertainty

	1	2	3	4	5	
About the same for all products						Varies a great deal from one line to another

A11: To what extent do you think the following factors are supporting your entrepreneurial behaviour (1=no support; 7=high support

Please circle the number that best represents your opinion *1= Strongly disagree* *5=Strongly agree*					
	1	2	3	4	5
National public funding	1	2	3	4	5
International public funding	1	2	3	4	5
Regional funding	1	2	3	4	5
Existence of a business plan competition	1	2	3	4	5
Existence of regional technology transfer offices	1	2	3	4	5
Existence of regional patent support offices	1	2	3	4	5
Interest of public research institutions in investing in firms' equity	1	2	3	4	5
Possibility of access to academic laboratories and equipment	1	2	3	4	5
Possibility to be hosted in a university incubator	1	2	3	4	5
Synergies between public research institutions and private firms	1	2	3	4	5

A12: In the industry your company operates in, in the last year:
Growth opportunities in the environment

	1	2	3	4	5	
have decreased dramatically						have increased dramatically

Product/service technology in your principal industry:

	1	2	3	4	5	
has remained the same						has changed very much

Rate of innovation of new operating processes and new products or services in your principal industry

	1	2	3	4	5	
rate has fallen dramatically						rate has changed dramatically

4. Research and development (R&D activity in your principal industry*)*

	1	2	3	4	5	
has fallen off greatly						has substantially increased

A13: To what extent do agree or disagree that your business collaborates with other firms in term of the following activities?

	Please circle the number that best represents your opinion *1= Strongly disagree* *5=Strongly agree*					
1	Joint ventures	1	2	3	4	5
2	Joint research and development or technology agreements	1	2	3	4	5
3	Joint manufacturing agreements	1	2	3	4	5
4	Licensing of products or technologies	1	2	3	4	5
5	Joint marketing or distribution exchange agreements	1	2	3	4	5
6	Joint purchasing, sales or advertising agreement	1	2	3	4	5
7	Joint personnel training	1	2	3	4	5

A14: How often are you in contact with the following groups and associations?

	Please circle the number that best represents your opinion	Never	Rarely	Sometimes	Very often	Always
1	Association of industries	1	2	3	4	5
2	Chamber of commerce and industry	1	2	3	4	5
3	Export promotion association	1	2	3	4	5
4	Entrepreneurs' association and networks	1	2	3	4	5
5	Religious groups and associations	1	2	3	4	5
6	Old student associations	1	2	3	4	5
7	Employers association	1	2	3	4	5
8	Business conferences	1	2	3	4	5

A15. During the last three years, which of the following factors listed below, do you perceive as hindering or limiting your ability to meet your business objectives? (*Please circle the appropriate number in each row)*

Please circle the number that best represents your opinion	Not important	Of little importance	Moderately important	Important	Very important
Finance:					
Inadequate access to debt finance	1	2	3	4	5
Inadequate access to equity finance	1	2	3	4	5
Interest rates too high	1	2	3	4	5
Do not have collateral to secure bank loan	1	2	3	4	5
Difficult to meet loan criteria	1	2	3	4	5
Inadequate family finance	1	2	3	4	5
Market:					
Inadequate demand	1	2	3	4	5
Too many competing firms	1	2	3	4	5
Competition from imported goods	1	2	3	4	5
High advertising costs	1	2	3	4	5
Inadequate market research	1	2	3	4	5
Managerial/ Technical Know-how:					
Shortage of skilled labour	1	2	3	4	5
High wages for skilled labour	1	2	3	4	5
Access to new technology	1	2	3	4	5
Inadequate financial skills	1	2	3	4	5
Inadequate management skills	1	2	3	4	5
Inadequate marketing skills	1	2	3	4	5
Inadequate technical skills	1	2	3	4	5
Inputs					
High cost of local raw materials	1	2	3	4	5
High cost of imported raw materials	1	2	3	4	5
Inadequate supply of raw materials	1	2	3	4	5
Outmoded equipment	1	2	3	4	5
High cost of replacing old equipment	1	2	3	4	5
Difficulty in finding appropriate equipment	1	2	3	4	5
Poor quality of local raw materials	1	2	3	4	5

Poor quality of imported raw materials	1	2	3	4	5
Economic/Regulatory					
High rate of inflation	1	2	3	4	5
High depreciation of the cedi	1	2	3	4	5
High tax and import duties	1	2	3	4	5
Registration / Licensing / Red tape	1	2	3	4	5
Corruption	1	2	3	4	5
Infrastructure					
High cost of utility charges	1	2	3	4	5
Lack of industrial sites	1	2	3	4	5
High transport costs	1	2	3	4	5
Low quality of electricity / water supply	1	2	3	4	5
Poor telecommunication networks	1	2	3	4	5
Socio-cultural					5
Use of business resources to support family	1	2	3	4	5
Others (Please specify)	1	2	3	4	5

A17: How strongly do you agree or disagree with the following statements relating to how you react to/overcome barriers to growth?

	Please circle the number that best represents your opinion	Strongly disagree	Disagree	undecided	Agree	Strongly agree
1	Support from government agencies	1	2	3	4	5
2	External business advice from private support agencies	1	2	3	4	5
3	Support from friends and family members	1	2	3	4	5
4	Support from NGOs	1	2	3	4	5
5	Collaboration with customers and suppliers at different levels of the value chain	1	2	3	4	5
6	Collaboration with other firms in same the industry	1	2	3	4	5
7	International partnership	1	2	3	4	5
8	Organisational Development	1	2	3	4	5

A18: How strongly do you agree or disagree with the following statements relating to the ways barriers influence your intentions to grow your business?

	Barriers in the internal and external environment:	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	Discourage me from growing the business	1	2	3	4	5
2	Divert the firm's resources from growth-oriented activities	1	2	3	4	5
3	Motivate me to shape the firm's growth strategy	1	2	3	4	5
4	Stop me from intending to grow the business	1	2	3	4	5
5	Postpone my intention realisation	1	2	3	4	5
6	Slow down the process of realising my	1	2	3	4	5

	intentions to grow the business					
7	Stop me from acting on my intentions to grow the business	1	2	3	4	5
8	Delay growth oriented activities in the business	1	2	3	4	5
9	Incite me to fix a business-size threshold	1	2	3	4	5
10	Dislocate my vision towards growth	1	2	3	4	5

SECTION B: ABOUT YPUR INTENTIONS AND PASSION

B1a. Do you want to grow the business?

Yes	No

B2: To what extent do you agree or disagree with the following statements relating to your intention to grow your business?

Please answer preamble one or two but not both and circle the number that best represents your opinion. *1 = I strongly disagree 5 = I strongly agree*						
1.	I want the business to be as large as possible	1	2	3	4	5
2.	I want the a size I can manage myself	1	2	3	4	5

B3: If you don't want to grow the business, what extent do you agree or disagree with the following statements relating to your no-growth decision your business?

These statements represent the reason why you do not want to grow or increase the size of your business. Please circle the number that best represents your opinion. *1 = strongly disagree 5 = strongly agree*						
1.	I would work more hours if the size of the business increases	1	2	3	4	5
2.	I would spend more time on work tasks if the size of business increases.	1	2	3	4	5
3.	The business' employees well-being would be worse-off if the size of the business increases	1	2	3	4	5
4.	The business' independence in relation to customers, suppliers and lenders would decrease if the size of the business increase	1	2	3	4	5
5.	It would be harder for me to maintain the quality of products and services if the size of the business increases	1	2	3	4	5
6.	I have reached a size that I am comfortable of managing	1	2	3	4	5
7.	I have no interest in the business anymore	1	2	3	4	5

	To what extent do you agree with each of these statements? Please circle the number that best represents your opinion	*Strongly Agree*				*Strongly Disagree*
1.	It is exciting to figure out new ways to solve unmet market needs that can be commercialised.	1	2	3	4	5
2.	Searching for new ideas for products/services to offer is enjoyable to me.	1	2	3	4	5
3.	I am motivated to figure out how to make existing products/services better.	1	2	3	4	5
4.	Scanning the environment for new opportunities really excites me.	1	2	3	4	5
5.	Inventing new solutions to problems is an important part of	1	2	3	4	5

	who I am.					
6.	Establishing a new company excites me.	1	2	3	4	5
7.	Owning my own company energizes me.	1	2	3	4	5
8.	Nurturing a new business through its emerging success is enjoyable.	1	2	3	4	5
9.	Being the founder of a business is an important part of who I am.	1	2	3	4	5
10.	I really like finding the right people to market my product/service to.	1	2	3	4	5
11.	Assembling the right people to work for my business is exciting.	1	2	3	4	5
12.	Pushing my employees and myself to make our company better motivates me.	1	2	3	4	5
13.	Nurturing and growing companies is an important part of who I am.	1	2		4	5
14.	For me, being an entrepreneur is a passion.	1	2	3	4	5
15.	I am completely taken with being an entrepreneur.	1	2	3	4	5

SECTION C: REGARDING YOUR COMPANY'S PRACTICES

	Please circle the number that best describes the extent to which you have utilised personal ties, networks, and connections during the past three years with: *Please circle the number that best represents your opinion.*	*Not at All*				*Very Large Extent*
1.	Political leaders in various levels of the government (e.g. Ministers of State)	1	2	3	4	5
2.	Officials in regulatory and supporting institutions (e.g., Ghana Standards Board, and Internal Revenue Service)	1	2	3	4	5
3.	Metropolitan/municipal/district chief executives	1	2	3	4	5
4.	Regional and national government politicians (e.g. regional or national party chairman/chairperson)	1	2	3	4	5
5.	Top managers at buyer/customer firms	1	2	3	4	5
6.	Top managers at supplier firms	1	2	3	4	5
7.	Top managers at competitor firms	1	2	3	4	5
8.	Local kings, chiefs and/or their representatives	1	2	3	4	5
9.	Religious leaders (e.g., pastors, priests, imams)	1	2	3	4	5

	To what extent do you agree or disagree with the following statements relating to your firm's business activities? *Please circle the box that best represents your opinion*	*Strongly Agree*				*Strongly disagree*
1.	Our business is known as an innovator among businesses our industry	1	2	3	4	5
2.	We promote new, innovative product in our company	1	2	3	4	5
3.	Our business provides leadership in developing new products	1	2	3	4	5
4.	Our company is consistently experimenting with new products	1	2	3	4	5
5.	We have built a reputation for being the best in our industry to develop new methods and technologies.	1	2	3	4	5
6.	Top managers of our business , in general, tend to invest in high-risk projects	1	2	3	4	5

7.	This business shows a great deal of tolerant for high-risk projects	1	2	3	4	5
8.	Our business strategy is characterised by a strong tendency to take risks	1	2	3	4	5
9.	We seek to exploit anticipated changes in our target market ahead of our rivals.	1	2	3	4	5
10.	We seize initiatives whenever possible in our target market operations.	1	2	3	4	5
11.	We act opportunistically to shape the business environment in which we operate.	1	2	3	4	5
12.	We typically adopt an ‘‘undo-the-competitor’’ posture in our target markets.	1	2	3	4	5
13.	We take hostile steps to achieve competitive goals in our target markets	1	2	3	4	5
14.	Our actions toward competitors can be termed as aggressive	1	2	3	4	5

B4: Which of the following business objectives listed below, do you consider being very important to your managerial decision making? (*Please circle the appropriate number in each row)*

Please circle the number that best represents your opinion	Not Important	Of little importance	Moderately Important	Important	Very Important
Profits	1	2	3	4	5
Sales growth	1	2	3	4	5
Market share	1	2	3	4	5
Value of the firm for future sale/floatation	1	2	3	4	5
Employee well-being	1	2	3	4	5
Corporate image and reputation	1	2	3	4	5
Innovation	1	2	3	4	5
Employment	1	2	3	4	5

B5: If you want to grow the business, how do you intend to grow the business or what is the likelihood of your business engaging in the following growth strategies within the next three years?

1=strongly disagree; 2= Disagree; 3=No opinion; 4 =agree; 5=strongly agree

	Please circle the number that best represents your opinion *1=Strongly disagree 5=strongly agree*					
1.	Adding a new product or service	1	2	3	4	5
2.	Selling to a new product or service	1	2	3	4	5
3.	Expanding distribution channels	1	2	3	4	5
4.	Expanding advertising and promotion	1	2	3	4	5
5.	Researching new markets	1	2	3	4	5
6.	Expanding scope of operating activities	1	2	3	4	5
7.	Acquiring new equipment	1	2	3	4	5
8.	Computerising current operations	1	2	3	4	5
9.	Upgrading computer systems	1	2	3	4	5
10.	Replacing present equipment	1	2	3	4	5
11.	Seeking additional finance	1	2	3	4	5
12.	Seeking professional advice	1	2	3	4	5
13	Applying for a loan	1	2	3	4	5
14	Adding operating space	1	2	3	4	5
15.	Expanding current facilities	1	2	3	4	5
16	Redesigning layout	1	2	3	4	5

17	Adding Specialized employees	1	2	3	4	5
18	Training of employees	1	2	3	4	5
19	Redesigning work methods	1	2	3	4	5

SECTION D: INFORMATION ABOUT YOUR CHARACTER

C1. Please indicate whether you are: Male [ ] Female [ ]

C2. What is your age? Under 30 years [ ] 30-39 years [ ] 40-49 years [ ] 50-59 years [ ] 60 years and over [ ]

C3. Which of the following educational qualification do you have?
(*Please circle appropriate box/es*)

JSS / Middle	Yes	No
SSS / GCE O. Level	Yes	No
Technical / Vocational / Apprenticeship	Yes	No
GCE A. Level	Yes	No
Bachelor's degree	Yes	No
Professional qualification (i.e. Accountancy/Law	Yes	No
Master's degree	Yes	No
Others (Please specify)	Yes	No

C4. Have you had any previous experience in business before starting this business?

Yes	No

C5. To what extent do you agree or disagree with the following statements relating to your managerial skills and risk taking propensity?

Please circle the number that best represents your opinion *1 = I strongly disagree* *5= I strongly agree*						
1.	I am good at problem solving	1	2	3	4	5
2.	I am good at communicating my point of view and supporting my ideas	1	2	3	4	5
3.	I am good at motivating people and leading teams	1	2	3	4	5
4.	I am good at maintaining interpersonal relationships and coordinating people	1	2	3	4	5

C6. To what extent do you agree or disagree with the following statements relating to your risk taking propensity?

Please circle the number that best represents your opinion *1 = I strongly disagree* *5 = I strongly agree*						
1.	I am not willing to take risks when choosing a job or a company to work for	1	2	3	4	5
2.	I prefer a low risk/high security job with a steady salary over a job that offers high risks and high rewards	1	2	3	4	5
4.	Please prefer to remain in a job that has problems that I know about rather than take the risk of working at a new job that has unknown problems, even if the new offers greater rewards	1	2	3	4	5
4.	I view risk on a job as a situation to be avoided at all costs.	1	2	3	4	5

C7: Please assess the technical and procedural skill levels you have now:

	Please circle the number that best represents your opinion *No skill at all* *Very skilled*							
1	Product designs	1	2	3	4	5	6	7
2	Process designs							
3	Production systems							
1	Accounting							
2	Marketing							
3	Purchasing and sales							
4	Purchasing and sales							
5	Finance							

C8: Please indicate the degree of certainty in performing each of the roles/tasks on a 5-point scale ranging from *1=completely unsure to 5=completely sure*

Please circle the number that best represents your opinion *1=Completely unsure* *5=Completely sure*						
1	Set and meet market share goals	1	2	3	4	5
2	Set and meet sales goals	1	2	3	4	5
3	Set and attain profit goals	1	2	3	4	5
4	Establish position in product market	1	2	3	4	5
6	Conduct market analysis	1	2	3	4	5
6	Expand business	1	2	3	4	5
7	New venturing and new ideas	1	2	3	4	5
8	New products and services	1	2	3	4	5
9	New markets and geographic territories	1	2	3	4	5
10	New methods of production, marketing and management	1	2	3	4	5
11	Reduce risk and uncertainty	1	2	3	4	5
12	Strategic planning and develop information system	1	2	3	4	5
13	Manage time by setting goals	1	2	3	4	5
14	Establish and achieve goals and objectives	1	2	3	4	5
15	Define organisational roles, responsibilities and policies	1	2	3	4	5
16	Take calculated risks	1	2	3	4	5
17	Make decisions under uncertainty and risk	1	2	3	4	5
18	Take responsibility for ideas decisions	1	2	3	4	5
19	Work under pressure and conflict	1	2	3	4	5
20	Perform financial analysis	1	2	3	4	5
21	Develop financial system and internal controls	1	2	3	4	5
22	Control cost	1	2	3	4	5

C9: To what extent do you agree or disagree with the following statements relating to the degree to which you will exert maximum motivation and effort towards the success of this business.

Please circle the number that best represents your opinion *1=Strongly disagree* *5=strongly agree*						
1	My business is the most important activity in my life	1	2	3	4	5
2	I will do whatever it takes to make my business a success	1	2	3	4	5
3	There is no limit as to how long I would give a maximum effort to grow my business	1	2	3	4	5
4	I would be willing to make significant personal sacrifices	1	2	3	4	5
5	I would go to work for someone else only long enough to make another attempt to grow my own business	1	2	3	4	5

6	My personal philosophy is to do ‘whatever it takes’ to grow my own business	1	2	3	4	5
7	I plan eventually to sell my business	1	2	3	4	5
8	I would like my business to make a significant contribution to the community	1	2	3	4	5
9	I would rather own my own business than earn a higher salary employed by someone else	1	2	3	4	5
10	Owning my own business is more important than spending more time with my family	1	2	3	4	5
11	I would rather own my own business than pursue another promising career	1	2	3	4	5

This ends the questionnaire. Thank you very much for your time and participation.

APPENDIX C: COVER LETTER (MAIN SURVEY)

Email: s.adomako@warwick.ac.uk

21 May, 2014

Dear Sir/Madam,

SMALL BUSINESS GROWTH SURVEY

Thank you very much for deciding to participate in my research on small business growth. I am a doctoral researcher from University of Warwick and I am undertaking my research in the area of entrepreneurship and Innovation. This study is being sponsored by the Warwick Business School. As part of my research I need to contact entrepreneurs in Ghana.

To assist me in my research, I would therefore be very grateful if you could complete this questionnaire for me. Completing the questionnaire should take you up to 20 minutes. I have provided instructions for the completion of each section of the questionnaire. You are kindly reminded that there are no right or wrong answers to the questions asked. Again, as I do not ask you for your name, you are guaranteed complete confidentiality and anonymity.

As a way of expressing my appreciation for assisting me in my research, you will have a chance of winning a £100 cash prize in your name for your favourite charity. Please include your business card or write your email at the back of the questionnaire so that I can notify you in case you emerge as the winner of the prize draw, and to ensure that the summary report is sent to your preferred contact address.

Your assistance with this study is very much appreciated. Should you have any queries, please do not hesitate to contact me on the contact details provided at the top of this letter or any of my doctoral supervisors: Dr Kevin Mole (Associate Dean, PhD Programme), Warwick Business School (Tel: +44(0)24 765 23918; Email: Kevin.Mole@wbs.ac.uk; and Professor Stephen Roper, Director, Enterprise Research Centre, Warwick Business School (Tel: +44 (0)24 765 22501; Email: Stephen.Roper@wbs.ac.uk).

Thank you for your help.

Yours sincerely,

Samuel Adomako

Entrepreneurship & Innovation Group

Appendix D: Final Questionnaire

SURVEY ON SMALL BUSINESS GROWTH

RESEARCH TEAM

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The purpose of this study is to collect information on small business growth. Please make each question a separate and independent judgement. There is no right or wrong answer to the questions asked, as different entrepreneurs have unique ways of managing their businesses. When complete, please kindly return this questionnaire to the field officer who is handing it in to you. As we do not ask you for your name, you are guaranteed complete confidentiality and anonymity. Only general findings from the study will be reported. You may respond in complete frankness as all your answers will remain *absolutely confidential*. Should you have any concerns about any aspect of the questionnaire, kindly contact me on the contact details provided at the top of this questionnaire. As a way of expressing our appreciation for assisting us in our study, we guarantee you a complimentary report containing a summary of this study. Please kindly include your business card or write your email/mobile number at the back of the questionnaire so that we can be sure that a summary report is sent to your preferred contact address. Again, there is no way this will be linked to your answers provided. Once again, thank you very much for your participation in this research. The questions in this booklet are to be completed by the *ENTREPRENEUR/FOUNDER ONLY*.

SECTION I: ABOUT REGULATIONS AND BUSINESS ENVIRONMENT

	To what extent do you agree or disagree with following statements? *Please circle the number that best represents your opinion*	*Strongly Disagree*				*Strongly Agree*
1.	Government organisations in this country assist individuals with starting their own businesses.	1	2	3	4	5
2.	The government sets aside government contracts for new and small businesses.	1	2	3	4	5
3.	Local and national governments have special support available for individuals who want to start a new business.	1	2	3	4	5
4.	The government sponsors organizations that help new businesses develop	1	2	3	4	5
5	Even after failing in an earlier business, the government assists entrepreneurs in starting again.	1	2	3	4	5
6.	Individuals know how to legally protect a new business	1	2	3	4	5
7.	Those who start new businesses know how to deal with much risk.	1	2	3	4	5
8.	Those who start new businesses know how to manage risk	1	2	3	4	5
9.	Most people know where to find information about markets for their Products	1	2	3	4	5
10.	Turning new ideas into businesses is an admired career path in this Country	1	2	3	4	5
11.	In this country, innovative and creative thinking is viewed as a route to success	1	2	3	4	5
12.	Entrepreneurs are admired in this country	1	2	3	4	5
13.	People in this country tend to greatly admire those who start their own business	1	2	3	4	5

	Please indicate how far you agree with the following statements? *Please circle the number that best represents your opinion*	*Strongly Agree*				*Disagree Disagree*
1.	Actions of competitors are quite easyto predict	1	2	3	4	5
2.	Demand and consumer tastes are fairly easy to forecast	1	2	3	4	5
3.	Product technology is not subject to very much change and is well established.	1	2	3	4	5
4.	Product/service technology in my principal industry has led to increased opportunities	1	2	3	4	5
5.	Rate of innovation of new operating processes and new products or services in my principal industry has led to increased opportunities	1	2	3	4	5
6.	Research and development (R&D activity in my principal industry) has led to increased opportunities	1	2	3	4	5
7.	Demand for industry products or services is declining	1	2	3	4	5
8.	Products become obsolete quickly in target markets	1	2	3	4	5
9.	Our customers have very different products requirements	1	2	3	4	5
10.	Our customers' buying habits are different for all our products	1	2	3	4	5
11.	The nature of the competition in our target markets varies from one product line to another	1	2	3	4	5

During the last three years, which of the following factors do you think limit your ability to meet your business objectives? *Please circle the number that matches your opinion in each row*	*Not at all*				*To an Extreme Extent*
Finance:					
Inadequate access to debt finance	1	2	3	4	5
Inadequate access to equity finance	1	2	3	4	5
Interest rates too high	1	2	3	4	5
Do not have collateral to secure bank loan	1	2	3	4	5
Difficult to meet loan criteria	1	2	3	4	5
Inadequate family finance	1	2	3	4	5
Market:					
Inadequate demand	1	2	3	4	5
Too many competing firms	1	2	3	4	5
Competition from imported goods	1	2	3	4	5
High advertising costs	1	2	3	4	5
Inadequate market research	1	2	3	4	5
Managerial/ Technical Know-how:					
Shortage of skilled labour	1	2	3	4	5
High wages for skilled labour	1	2	3	4	5
Access to new technology	1	2	3	4	5
Inadequate financial skills	1	2	3	4	5
Inadequate management skills	1	2	3	4	5
Inadequate marketing skills	1	2	3	4	5
Inadequate technical skills	1	2	3	4	5
Inputs:					
High cost of local raw materials	1	2	3	4	5
High cost of imported raw materials	1	2	3	4	5
Inadequate supply of raw materials	1	2	3	4	5
Outmoded equipment	1	2	3	4	5
High cost of replacing old equipment	1	2	3	4	5
Difficulty in finding appropriate equipment	1	2	3	4	5
Poor quality of local raw materials	1	2	3	4	5
Poor quality of imported raw materials	1	2	3	4	5
Economic/Regulatory:					
High rate of inflation	1	2	3	4	5
High depreciation of the cedi	1	2	3	4	5
High tax and import duties	1	2	3	4	5
Registration / Licensing / Red tape	1	2	3	4	5
Corruption	1	2	3	4	5
Infrastructure:					
High cost of utility charges	1	2	3	4	5
Lack of industrial sites	1	2	3	4	5
High transport costs	1	2	3	4	5
Low quality of electricity / water supply	1	2	3	4	5
Poor telecommunication networks	1	2	3	4	5
Socio-cultural:					
Use of business resources to support family	1	2	3	4	5

During the next year, thinking about barriers in the business environment would……

	Please circle the number that best represents your opinion	*Strongly Disagree*				*Strongly Agree*
1.	Discourage me to grow this business further	1	2	3	4	5
2.	Be unpleasant to me to emphasise on entrepreneurial behaviour	1	2	3	4	5
3.	Limit my ability act in an entrepreneurial way	1	2	3	4	5
4.	Reduce my interest in this business	1	2	3	4	5
5.	Discourage me to take high risk projects	1	2	3	4	5
6.	Divert my firm's resources from growth-oriented activities	1	2	3	4	5
7.	Dislocate me from growth oriented activities	1	2	3	4	5
8.	Divert my attention from this business	1	2	3	4	5
9.	Reduce my focus on entrepreneurial activities	1	2	3	4	5
10.	Motivate to shape the firm's growth strategy	1	2	3	4	5
11.	Strengthen my effort to shape the growth of this business	1	2	3	4	5
12.	Incentivise me to grow my business further	1	2	3	4	5
13.	Increase my motivation to come out with innovative ideas to grow this business	1	2	3	4	5
14.	Energise me to run this business	1	2	3	4	5
15.	Force me to postpone my intention realisation	1	2	3	4	5
16.	Put me at a standstill to realising my intentions to grow the business	1	2	3	4	5
17.	Stop me from acting on my intentions to grow the business	1	2	3	4	5
18.	Stop me from growth oriented activities	1	2	3	4	5
19.	Force me to fix a business-size threshold	1	2	3	4	5
20.	Make it uninteresting to grow this business	1	2	3	4	5
21.	Bring several challenges to operating this business	1	2	3	4	5
22.	Increase my attention about challenges in running this business	1	2	3	4	5
23.	Have no effect on my business intentions	1	2	3	4	5
24.	Not influence my entrepreneurial spirit	1	2	3	4	5

	Please indicate whether or not you agree with following statements (*Please circle the number that best represents your opinion)*	*Strongly Disagree*				*Strongly Agree*
1.	The court system in Ghana can be trusted	1	2	3	4	5
2.	I have confidence in the political stability in Ghana	1	2	3	4	5
3.	Corruption in Ghana is widespread	1	2	3	4	5
4.	Crime and theft is common in Ghana	1	2	3	4	5
5.	The tax administration in Ghana is effective	1	2	3	4	5

During the next year, emphasizing on and thinking about barriers in the environment would be:

	Please circle the number that best represents your opinion	*Strongly Disagree*				*Strongly Agree*
1.	Unpleasant	1	2	3	4	5
2.	Useless	1	2	3	4	5
3.	Unsuitable	1	2	3	4	5
4.	Negative	1	2	3	4	5
5.	Laudable	1	2	3	4	5
6.	Acceptable	1	2	3	4	5
7.	Beneficial	1	2	3	4	5
8.	Good	1	2	3	4	5

SECTION II: REGARDING YOUR INTENTION AND PASSION

	Please indicate whether or not you agree with following statements (*Please circle the number that best represents your opinion)*	*Strongly Disagree*				*Strongly Agree*
1.	I would like my business to become as large as possible	1	2	3	4	5
2.	I would like my business to have a size I can manage myself or with a few key employees	1	2	3	4	5

	Please indicate the extent to which you agree or disagree with the following statements relating to your intention for operating this business. *(Please circle the number that best represents your opinion).*	*Strongly Disagree*				*Strongly Agree*
1.	To operate a business that exploits a new technology that promises to have very good prospects for long term growth and eventual profitability	1	2	3	4	5
2.	To operate a business that will slowly build up sales and eventually becomes a very large business with potentially thousands of employees spread around the world	1	2	3	4	5
3.	To operate a business that is based on the gamble that a particular change in the laws will happen, and that I will therefore be in the position to capitalise on that change	1	2	3	4	5
4.	To operate a business that involves a high risk of failure, but is expected to be extremely profitable quite quickly if it takes off	1	2	3	4	5
5.	To operate a business that will not be very profitable at first, requiring several rounds of external funding as it grows, before it eventually becomes highly profitable	1	2	3	4	5
6.	To operate a business that does not require me to work long hours every day, such that I can spend plenty of time at home and/or taking part in social activities	1	2	3	4	5
7.	To operate a business that does not require me to work at high levels of intensity, which might cause fatigue, stress, and other undesirable effects	1	2	3	4	5
8.	To operate a business that allows me to earn enough money by doing the things that I like best	1	2	3	4	5
9.	To operate a business that focuses on a recreational other pastime that I really like to do best	1	2	3	4	5
10.	To operate a business that allows me to spend plenty of time away from work at rest or undertaking recreational activities	1	2	3	4	5
11.	To operate a business that capitalises on my knowledge and enthusiasm for a particular hobby, sport, or other recreational pastime that I really enjoy doing	1	2	3	4	5
12.	To operate a business that allows me to close the business and take time off or holiday, whenever I choose	1	2	3	4	5
13	To operate a business that allows me to work a job that is more 'play' than work, since I really enjoy the type of work I would be doing.	1	2	3	4	5

SECTION II *(Continues)*

	To what extent do you agree with each of these statements? Please circle the number that best represents your opinion	*Strongly Disagree*				*Strongly Agree*
1.	It is exciting to figure out new ways to solve unmet market needs that can be commercialised.	1	2	3	4	5
2.	Searching for new ideas for products/services to offer is enjoyable to me.	1	2	3	4	5

3.	I am motivated to figure out how to make existing products/services better.	1	2	3	4	5
4.	Scanning the environment for new opportunities really excites me.	1	2	3	4	5
5.	Inventing new solutions to problems is an important part of who I am.	1	2	3	4	5
6.	Establishing a new company excites me.	1	2	3	4	5
7.	Owning my own company energizes me.	1	2	3	4	5
8.	Nurturing a new business through its emerging success is enjoyable.	1	2	3	4	5
9.	Being the founder of a business is an important part of who I am.	1	2	3	4	5
10.	I really like finding the right people to market my product/service to.	1	2	3	4	5
11.	Assembling the right people to work for my business is exciting.	1	2	3	4	5
12.	Pushing my employees and myself to make our company better motivates me.	1	2	3	4	5
13.	Nurturing and growing companies is an important part of who I am.	1	2		4	5
14.	For me, being an entrepreneur is a passion.	1	2	3	4	5
15.	I am completely taken with being an entrepreneur.	1	2	3	4	5

SECTION III: REGARDING YOUR COMPANY'S PRACTICES

	Please circle the number that best describes the extent to which you have utilised personal ties, networks, and connections during the past three years with: *Please circle the number that best represents your opinion.*	*Not at All*				*Very Large Extent*
1.	Political leaders in various levels of the government (e.g. Ministers of State)	1	2	3	4	5
2.	Officials in regulatory and supporting institutions (e.g., Ghana Standards Board, and Internal Revenue Service)	1	2	3	4	5
3.	Metropolitan/municipal/district chief executives	1	2	3	4	5
4.	Regional and national government politicians (e.g. regional or national party chairman/chairperson)	1	2	3	4	5
5.	Top managers at buyer/customer firms	1	2	3	4	5
6.	Top managers at supplier firms	1	2	3	4	5
7.	Top managers at competitor firms	1	2	3	4	5
8.	Local kings, chiefs and/or their representatives	1	2	3	4	5
9.	Religious leaders (e.g., pastors, priests, imams)	1	2	3	4	5

	To what extent do you agree or disagree with the following statements relating to your firm's business activities? *Please circle the box that best represents your opinion*	*Strongly Disagree*				*Strongly Agree*
1.	Our business is known as an innovator among businesses our industry	1	2	3	4	5
2.	We promote new, innovative product in our company	1	2	3	4	5
3.	Our business provides leadership in developing new products	1	2	3	4	5
4.	Our company is consistently experimenting with new products	1	2	3	4	5

5.	We have built a reputation for being the best in our industry to develop new methods and technologies.	1	2	3	4	5
6.	Top managers of our business , in general, tend to invest in high-risk projects	1	2	3	4	5
7.	This business shows a great deal of tolerant for high-risk projects	1	2	3	4	5
8.	Our business strategy is characterised by a strong tendency to take risks	1	2	3	4	5
9.	We seek to exploit anticipated changes in our target market ahead of our rivals.	1	2	3	4	5
10.	We seize initiatives whenever possible in our target market operations.	1	2	3	4	5
11.	We act opportunistically to shape the business environment in which we operate.	1	2	3	4	5
12.	We typically adopt an ‘‘undo-the-competitor’’ posture in our target markets.	1	2	3	4	5
13.	We take hostile steps to achieve competitive goals in our target markets	1	2	3	4	5
14.	Our actions toward competitors can be termed as aggressive	1	2	3	4	5
15.	Personnel in this business behave autonomously in our business operations.	1	2	3	4	5
16.	Personnel in this business act independently to carry out their business ideas through to completion	1	2	3	4	5
17.	Personnel in this business are self-directed in pursuit of target market opportunities	1	2	3	4	5

	Please indicate the extent to which you agree or disagree with the following statements. *(Please circle the number that best represents your opinion).*	*Strongly Disagree*				*Strongly Agree*
1.	I am satisfied with the funds available for my company’s operations	1	2	3	4	5
2.	My company has easy access to funds to support its business operations	1	2	3	4	5
3.	My company’s business operations are well financed relative to our rivals.	1	2	3	4	5
4.	My employees are highly skilled	1	2	3	4	5
5.	Personnel in my company are knowledgeable people.	1	2	3	4	5
6.	Staff in my company are widely considered the best in our industry.	1	2	3	4	5
7.	My employees are creative and bright people.	1	2	3	4	5
8.	My employees are experts in their particular jobs and functions.	1	2	3	4	5

SECTION IV: ABOUT YOUR COMPANY’S GROWTH AND PERFORMANCE

	Compare to your industry average, how would you grade your company’s growth on the following indicators?	*Very Low*				*Very High*
1.	Growth of sales	1	2	3	4	5
2.	Sales volume	1	2	3	4	5
3.	Return on sales	1	2	3	4	5
4.	Growth in full-time employee number	1	2	3	4	5
5.	Return on assets	1	2	3	4	5
6.	Growth in productivity	1	2	3	4	5

7.	Growth in profit(before tax)	1	2	3	4	5
8.	Overall company growth	1	2	3	4	5

What would you say are the total sales and number of employees in your business during the past three years (that is from 2011 to 2013)?

	Please write the firm's yearly turnover and the number of employees in each year	2011	2012	2013
1.	Total annual sales/Revenue before tax (in UD$)			
2.	Total number of full-time employees			

Where do you sell your products? (*Please circle appropriate box/es*)

Type of Market	Do you sell in this type of market?	
Local market (Ghana)	Yes	No
International market- Africa/Europe/North America	Yes	No

	Please estimate the percentage (%) of your sales that was generated by	Percentage (%)
1.	Products that the firm was not selling in Ghana three years earlier	
2.	Geographical markets (e.g. regions) in Ghana that the firm was not serving three years before	
3.	Products that the firm was not selling in international markets three years earlier	
4.	International markets that the firm was not serving three years before	

SECTION V: ABOUT YOUR COMPANY CHARACTERISTICS

Please answer the following questions by ticking (√) the appropriate boxes or write down your responses were necessary.

1. Your gender: Female ☐ Male ☐

2. Your age: 25 or younger ☐ 26 – 35 ☐ 36 -45 ☐ 46-55 ☐ Over 56 ☐

3. Your education: High school ☐ HND ☐ Bachelors ☐ Postgraduate ☐

4. How long has your company been in business? Years ☐ Months ☐

5. Prior to starting this business, did you have any management experience with other businesses or organisations?

Yes	No

6. Would you consider your company to be registered to collect VAT?

Yes	No

7. How many businesses have you started?

8. Which one of the following legal forms best describes your business? (*Please circle only one*)

1.	Unregistered Sole Proprietorship	1
2.	Registered Sole Proprietorship	2
3.	Limited Liability Company	3
4.	Partnership	4
5.	Other (please specify)	5

9: Is your business in an urban or rural location? *(Please tick one box)*

	Please circle the box that matches the location of your business	(Tick one)
1.	Urban (cities and large towns)	
2.	Rural (small towns and villages)	

10. What sector does your business belong? (*Please circle appropriate number).*

1.	Food/ beverage	1
2.	Textiles/garment /footwear	2
3.	Wood /furniture	3
4.	Paper production	4
5.	Soap making/toiletries	5
6.	Technology	6
7.	Other (please specify)	7

This ends the questionnaire. Thank you very much for your time and valuable contribution to this study. To receive a free copy of the final report from this study, please give your business card to the research assistant, or fill in the following details (please use block letters):

Business Location: ……

Business Tel No:……Email:…….

THANK YOU

APPENDIX E1: Collinearity Diagnostic Test

Dependent Variable = Business Growth	Collinearity Statistics	
	Tolerance	VIF
Firm size	.954	1.048
Firm age	.826	1.211
Founder's age	.816	1.225
Gender	.967	1.034
Education	.937	1.067
Working experience	.961	1.041
Prior growth	.954	1.048
Passion for inventing	.973	1.028
Passion for founding	.943	1.061
Passion for developing	.945	1.058

APPENDIX E2: Collinearity Diagnostic Test

Dependent Variable = Business Growth	Collinearity Statistics	
	Tolerance	VIF
Firm size	.910	1.077
Firm age	.929	1.206
Founder's age	.812	1.232
Gender	.858	1.044
Education	.826	1.080
Working experience	.852	1.050
Prior growth	.852	1.050
Political ties (PT)	.819	1.088
Passion for Inventing (PFI)	.808	1.101
Passion for Founding (PFF)	.781	1.281
Passion for Developing (PFD)	.771	1.261
PFI x PT	.491	1.181
PFF x PT	.690	1.392
PFD x PT	.632	1.562